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FROM THE

CONSULS OF THE UNITED STATES.

VOL. XXII.

APRIL-JUNE, 1887.

DEPARTMENT OF STATE ★ UNITED STATES OF AMERICA. ★

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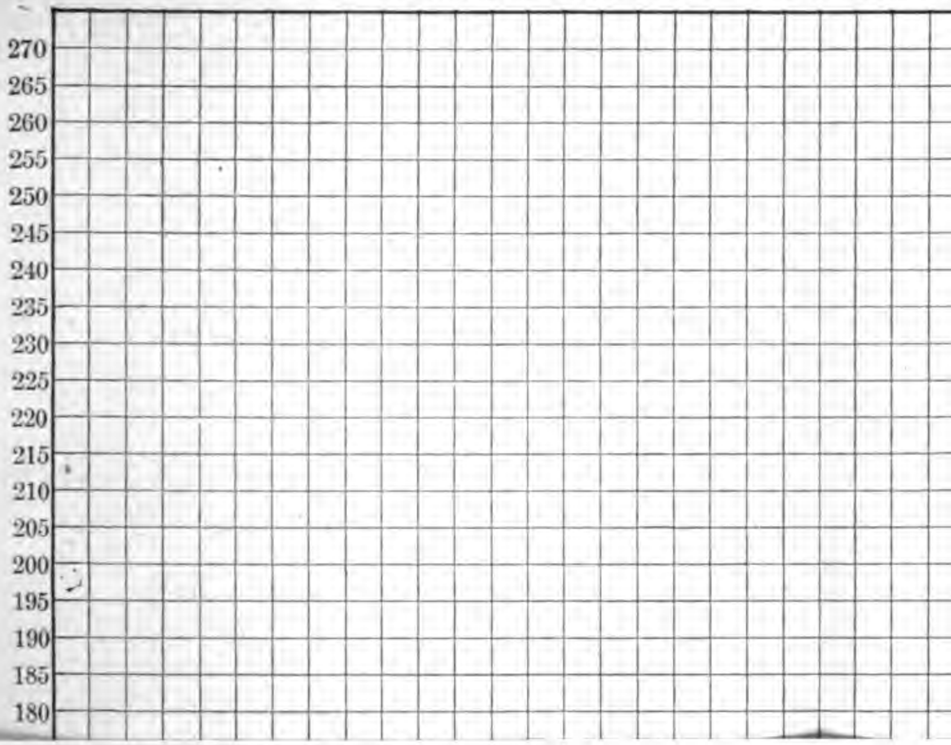


CONSULAR REPORTS

ON

EMIGRATION FROM EUROPE.

NO. 76.—APRIL, 1887.

NOTE.

The following reports are selected from House Executive Document No. 157, second session Forty-ninth Congress, and are intended to give a general view of the actual conditions which control the emigration from European countries to the United States:

DEPARTMENT OF STATE,
February 9, 1887.

To the President:

I have the honor to transmit a series of reports from consular officers of the United States on the extent and character of the emigration from their respective districts. As supplementary to this series, reports will be found from consular officers in Canada, Mexico, Central and South America, and Australia describing in general terms the nature of the immigration into those countries. Taken together these reports afford a complete representation of the movements of population from one country to another, the streams in which this movement flows, and the factors which determine the extent and direction of these streams.

To summarize the results of this survey would be almost impossible, as local influences are dominating causes, and the conditions in no two countries, even in no two districts, are the same. The prevailing motive of emigration is the desire to secure a greater degree of welfare, to move from a place where the struggle for existence is continuous and intense, to a place where a higher degree of prosperity may be obtained for the same expenditure of labor or capital. This prevailing influence is modified in different ways, and these modifying factors are developed in the following reports.

One feature of this subject, which received little attention in the consular reports, viz, the countries from which the highest proportions of skilled labor as compared with the total emigration are derived, has been outlined by tables prepared in this Department from the returns of the Treasury Department. The result tends to show that when the industrial welfare of the United States is considered, indiscriminate restriction of immigration would be quite as mischievous as indiscriminate permission is sometimes represented to be.

Respectfully submitted.

T. F. BAYARD.

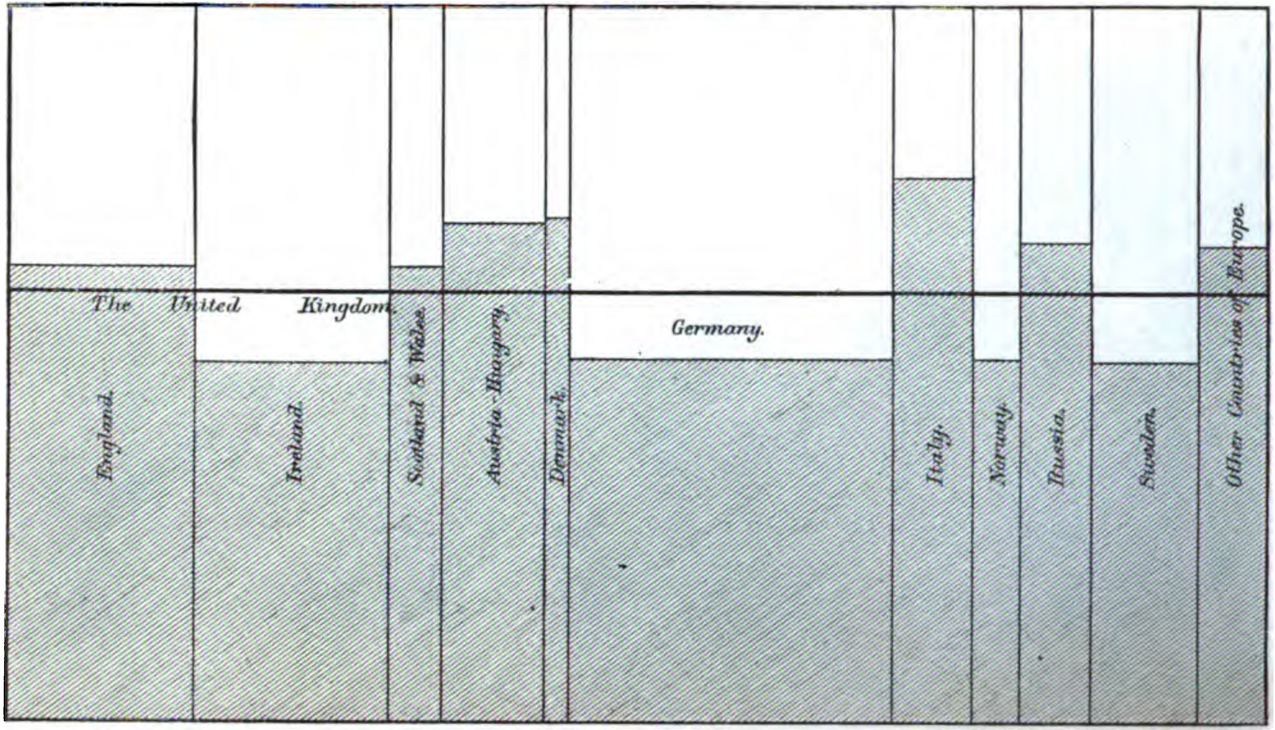
DEPARTMENT OF STATE,
BUREAU OF STATISTICS,
February 9, 1887.

SIR: I have the honor to submit the replies of consular officers of the United States in Europe to questions respecting the extent and character of emigration from their consular districts. The fulness of these replies leave little to be desired, and covering a period of nearly thirteen years—a period of great commercial and industrial depression, of a partial recovery followed by a second series of years of stagnation—the reports give a fair idea of the conditions which control or influence emigration under all economic conditions. Each nation or people, and each district, may have its special incidents which should be taken into account; but the great tide of emigration ebbs and flows in a clearly defined movement consequent upon the economic situation in the original country, as compared with the prospects of success in the country to which emigration tends. It is the difference between economic well-being in Europe and that in the United States, being so much to the advantage of the latter, that has turned the stream of population hither, and not to younger communities where the conditions of success are now less favorable, though becoming more and more advantageous to the emigrant. As supplementary to the reports from European nations, there will be found reports from our consuls in Canada, in Mexico, and in Central and South America, giving the conditions of emigration, and the special features which are attracting emigration. Taken as a series, too great praise cannot be given to the industry and intelligence which the consular service has shown in replying to the questions submitted by the Department.

There is one phase of the question that may be dwelt upon, the more so because it has received little attention in the reports that follow—the migration of skilled labor. The mobility of labor, whether skilled or unskilled, is a comparatively recent economic phenomenon. and has done much to modify the conditions of production, still more of competition, whether local or national. The extended employment of machinery, which demands a lower or less intelligent grade of labor than was needed when the processes required skill and judgment of the worker, has still more tended to equalize, and at the same time to intensify the conditions of competition. By displacing labor, these forces tend to encourage and even force emigration. The demand for labor being temporarily lessened, a double result follows—labor readily passes from place to place and from country to country, and competes more sharply with itself.

TOTAL IMMIGRATION INTO THE UNITED STATES FROM EUROPE FOR THE FISCAL YEAR ENDING JUNE 30, 1886.

[Shaded portion represents male immigrants. The line running through the diagram represents the proportion of male and female for all Europe.]



The movement of population from European countries, and in this connection it may be stated that Europe alone supplies any real basis for study and comparison, has assumed vast proportions, more than half a million of souls annually leaving their own countries to seek homes in another. In 1884, a year that was not marked by an exceptional migration, the twelve leading nations of Europe gave 567,588 emigrants, the United Kingdom and Germany supplying nearly 70 per cent. of the total. The distribution of this movement was as shown in the diagram.

Nearly two-thirds of this movement were directed towards the United States, and since 1874 nearly 5,000,000 of such immigrants have been received, constituting a total equal to about one-eleventh of the present population of the country. In detail the distribution of emigration from the more important countries of Europe was as given in the accompanying chart:

This vast movement of population cannot be of uniform quality, for the advantages of migration and the opportunities are quite as accessible to the highest forms of skilled labor or to men of property, as to the masses of unskilled labor and the idlers who congregate in the great cities. The immigrants received from one nation may be far more desirable than those from another. It was to determine, as far as possible, the character of the immigrants coming to the United States, not the least important of the many questions involved in an unrestricted immigration, that the Department instituted this inquiry. There has of late been shown no little restiveness among workingmen caused by the increasing difficulty of obtaining what they consider to be adequate wages, always tending downwards, it is claimed, by reason of the flood of "cheap labor" coming from Europe. It is no part of my intention to pass upon the justice of this complaint, or to show how the domestic laborer, himself usually of foreign origin, may be protected from foreign competition. A study of the returns of the Bureau of Statistics, Treasury Department, will show from what countries the highest forms of skilled labor are obtained, and to what extent each nation contributes to advance the industrial development of this country by making such contributions.

Total immigration classified by occupation.

Year.	Professional.	Skilled.	Miscellaneous.	Occupation not stated.	Without occupation.	Total.
1873	2,980	48,792	168,724	4,868	234,439	459,803
1874	2,477	38,700	117,041	4,233	150,889	313,339
1875	2,426	33,803	84,546	1,291	105,432	227,498
1876	2,400	24,200	72,275	910	70,201	169,986
1877	1,885	21,006	55,650	673	62,643	141,857
1878	1,510	16,531	57,806	738	61,884	138,469
1879	1,639	21,362	73,053	897	80,875	177,826
1880	1,773	49,929	188,109	2,194	215,252	457,257
1881	2,812	66,457	244,492	8,140	347,530	669,431
1882	2,992	72,664	310,501	10,619	392,210	788,992
1883	2,450	62,505	216,549	46,660	275,658	603,322
1884	2,284	55,061	184,195	31,665	245,367	518,592
1885	2,097	39,817	141,702	15,398	196,332	395,346
1886	2,078	36,522	137,651	496	157,456	334,203
Total	31,803	587,349	205,229	128,782	2,596,188	5,396,416

The same table expressed in percentages will give the following, no account being taken of the column "occupation not stated":

Year.	Professional.	Skilled.	Miscellaneous.	Without occupation.	Year.	Professional.	Skilled.	Miscellaneous.	Without occupation.
	Pr. ct.	*Pr. ct.*	*Pr. ct.*	*Pr. ct.*		*Pr. ct.*	*Pr. ct.*	*Pr. ct.*	*Pr. ct.*
1873	0.8	10.6	36.7	50.9	1881	0.4	9.9	36.5	51.9
1874	0.7	12.3	37.3	48.1	1882	0.38	9.2	39.3	49.7
1875	1.0	14.7	37.1	41.9	1883	0.4	10.3	35.8	45.6
1876	1.4	14.3	42.5	41.3	1884	0.44	10.6	35.5	47.3
1877	1.3	14.9	39.2	44.1	1885	0.5	10.	35.9	49.7
1878	1.	11.9	41.8	44.7	1886	......	10.93	41.2	47.11
1879	0.9	12.0	41.6	40.0					
1880	0.4	10.9	41.1	47.0	Total	0.59	10.9	38.	48.1

In detail the returns show the following results:

PERCENTAGE OF IMMIGRATING SKILLED L
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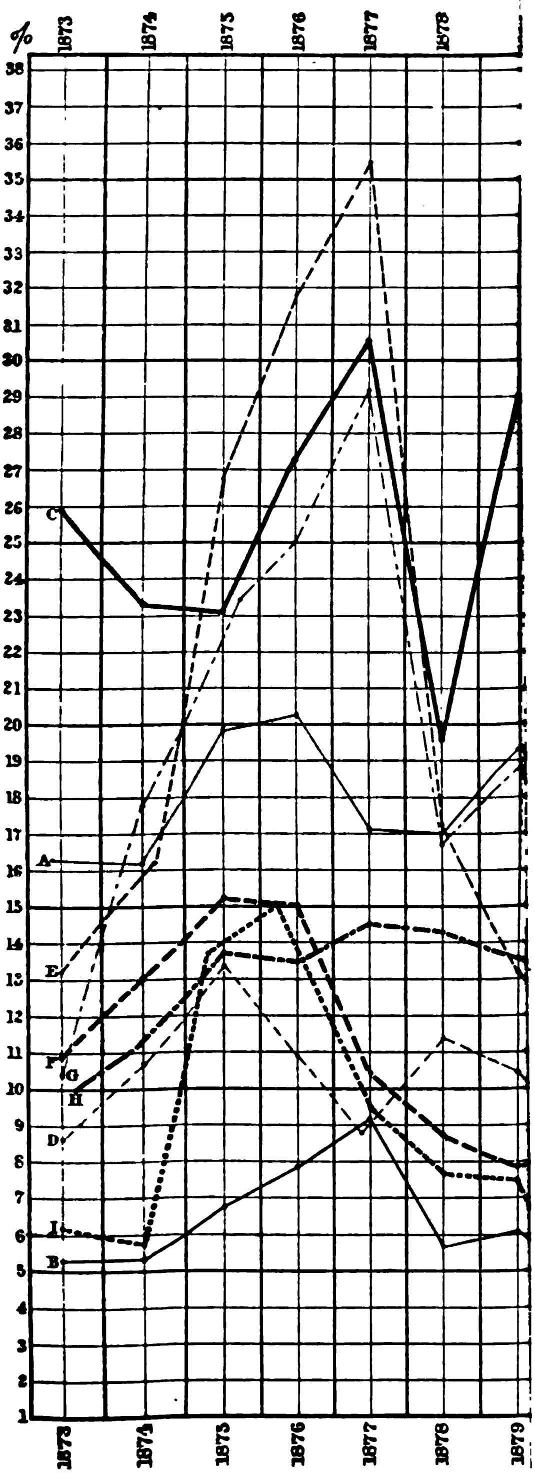

Occupation.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Actors	39	93	111	88	148	51	41	22	116	55	180	88	94	78
Artists	111	157	105	140	92	81	144	180	340	217	148	142	126	165
Clergymen	384	446	366	417	373	310	320	269	387	418	309	231	250	369
Editors	16	21	9	42	66	13	21	32	81	61	23	21	25	32
Engravers	133	54	80	106	97	26	61	28	140	82	60	75	57	49
Lawyers	114	97	126	76	66	37	39	46	70	102	83	47	53	93
Musicians	559	572	500	421	320	396	341	390	430	543	334	555	377	367
Physicians	182	150	187	177	119	91	125	183	142	284	118	160	176	105
Sculptors	21	22	28	29	43	19	43	59	96	132	119	133	96	84
Teachers	370	482	378	301	185	190	203	211	348	479	454	415	408	353
All others, n. s.	1,101	374	527	597	376	278	301	336	662	630	618	437	426	429
Total professional	2,960	2,476	2,426	2,400	1,885	1,510	1,639	1,773	2,812	2,992	2,450	2,284	2,097	2,078
Accountants, &c.	46	50	154	89	109	97	105	184	256	182	156	162	113	129
Bakers	1,398	1,030	730	640	507	464	636	1,877	2,264	2,453	2,331	1,971	1,465	1,209
Barbers, hair-dressers	228	192	240	156	142	113	141	248	409	478	554	495	371	355
Blacksmiths	1,804	1,461	1,267	816	787	673	911	2,311	3,986	4,099	2,804	2,508	1,819	1,420
Brewers	544	743	374	284	241	350	236	617	956	955	885	984	609	852
Butchers	1,346	979	582	521	489	645	710	1,138	1,998	2,269	2,102	2,059	1,391	1,190
Cabinet-makers	122	99	145	114	109	173	358	1,574	1,882	731	118	109	92	114
Carpenters and joiners	6,406	4,354	3,383	2,631	1,730	1,876	2,759	8,234	11,481	11,900	8,662	7,216	4,392	3,678
Clerks	2,324	1,547	1,414	1,885	1,253	1,340	1,724	2,860	3,189	3,412	3,387	3,518	3,413	3,027
Coopers	601	356	431	325	265	287	147	453	544	478	540	353	188	158
Dressmakers	230	241	216	218	229	179	287	338	398	607	656	609	421	363
Engineers	719	696	558	562	515	355	630	1,320	1,216	1,299	1,079	962	770	798
Gardeners	538	371	309	421	331	239	260	377	957	917	961	887	599	523
Glaziers	80	91	59	57	78	41	81	82	244	190	209	142	111	118
Iron workers	1,482	671	550	384	268	79	153	528	488	419	309	354	291	413
Jewelers	243	217	291	160	174	117	125	272	317	295	200	189	165	154
Locksmiths	297	237	200	192	202	349	141	198	642	340	1,230	967	554	389
Machinists	358	208	475	261	292	284	208	592	641	375	191	232	366	202
Mariners	1,862	1,934	2,050	1,224	1,329	871	905	1,458	1,580	1,911	1,844	1,742	1,477	1,808
Masons	4,293	4,478	2,650	1,713	1,303	642	671	2,033	3,208	4,279	2,959	2,562	1,893	1,835
Mechanics, n. s.	2,242	899	471	404	208	343	786	3,309	4,109	4,325	4,156	2,534	2,019	1,886
Millers	573	419	243	197	186	163	206	442	842	1,027	876	839	570	439
Miners	5,716	4,926	4,055	2,237	1,670	1,578	2,588	6,086	5,204	6,485	4,743	3,794	2,940	3,469
Painters	1,055	564	585	440	386	252	450	838	1,342	1,422	1,197	1,306	929	774
Plasterers	151	204	49	436	110	21	40	90	329	284	163	173	90	203
Plumbers	285	158	103	98	67	21	42	148	185	238	231	172	163	180
Printers	317	284	397	152	151	86	165	208	371	569	390	357	321	251
Saddlers and harness-makers	354	405	233	136	73	135	126	219	441	520	470	464	285	265
Seamstresses	350	414	464	287	236	365	166	379	685	475	628	567	517	438
Shipwrights	314	1,503	539	103	390	170	108	571	288	155	90	94	86	17
Shoemakers	2,411	1,039	1,265	898	680	777	1,119	1,849	3,967	4,366	3,203	2,931	2,150	1,681
Spinners	270	170	192	110	72	83	95	210	405	2,431	3,589	2,646	1,000	293
Stone-cutters	529	208	644	279	529	158	113	328	433	551	470	481	341	323

Occupation.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Tailors	2, 393	1, 397	1, 463	969	668	815	1, 062	2, 134	3, 106	8, 748	3, 235	3, 317	2, 228	2, 692
Tanners and curriers	144	142	146	108	161	78	100	171	272	313	836	202	151	128
Tinners	327	341	278	215	156	91	105	157	402	346	347	568	323	192
Tobacco manufacturers	675	544	713	384	425	317	478	515	1, 684	1, 045	675	1, 506	1, 360	1, 160
Watch and clock	234	158	154	158	159	113	149	269	344	443	404	364	306	307
Weavers	1, 357	892	776	454	354	292	515	1, 499	1, 689	1, 643	1, 679	1, 359	1, 006	969
Wheelwrights	235	100	94	94	109	23	30	144	275	230	291	229	180	107
All others, n. s	3, 849	3, 219	4, 765	3, 889	3, 793	1, 476	1, 581	4, 135	3, 524	8, 881	4, 106	3, 097	2, 393	2, 478
Total skilled	48, 792	38, 700	33, 803	24, 200	21, 006	16, 531	21, 362	49, 929	66, 457	72, 764	62, 505	55, 061	30, 817	36, 522
Agents, factors	119	107	59	70	46	34	66	52	122	159	123	136	125	139
Bankers	32	21	23	29	86	24	28	13	33	56	12	18	60	24
Cooks	293	215	284	231	157	241	226	220	450	539	434	271	312	314
Farmers	36, 983	28, 775	16, 447	14, 536	13, 188	14, 843	19, 907	47, 204	58, 028	61, 888	39, 048	42, 050	27, 585	20, 600
Grocers	300	198	161	187	215	119	104	240	293	368	362	246	236	232
Hotel keepers	104	56	80	158	131	81	143	103	157	144	334	769	416	109
Laborers	104, 423	65, 895	46, 877	38, 847	23, 482	26, 656	36, 897	105, 012	147, 816	209, 605	136, 071	106, 478	83, 068	86, 853
Merchants	7, 038	5, 259	4, 706	4, 519	4, 239	4, 217	4, 861	7, 508	8, 766	9, 375	7, 449	6, 522	5, 870	5, 733
Servants	16, 259	12, 427	10, 579	6, 493	5, 158	6, 157	6, 804	18, 580	19, 342	23, 010	27, 988	24, 249	20, 213	20, 198
Shepherds	231	129	69	31	88	44	34	60	486	312	214	190	81	49
All others, n. s	2, 942	3, 959	5, 261	7, 174	6, 960	5, 390	3, 983	9, 117	8, 999	5, 045	4, 014	3, 266	3, 736	3, 400
Total miscellaneous	168, 724	117, 041	84, 546	72, 275	55, 650	57, 806	73, 053	188, 109	244, 492	310, 501	216, 049	184, 195	141, 702	137, 551

The table on page 3 shows that in a period of depression the proportion of skilled labor tended to increase, and this would be the natural consequence, as that labor receives the highest wages, is able to save more, and therefore emigrates more readily. On the other hand, those without occupations are the soonest to feel the effects of a depression. Allowance, however, must be made for sex, as the larger part of emigrating females is classed with those having no occupation. As a further guide I give the proportion of each sex in the different classes of occupations:

MALES.

Years.	Occupations.					
	Professional.	Skilled.	Miscellaneous.	Not stated.	Without.	Total.
1873	2,741	47,490	152,581	1,371	71,609	275,792
1874	2,137	37,301	104,511	1,054	44,222	189,225
1875	2,147	32,014	73,732	255	31,802	139,950
1876	2,182	23,015	65,579	841	20,669	111,786
1877	1,674	20,144	50,116	287	19,812	92,033
1878	1,375	15,806	51,409	138	17,531	86,259
1879	1,515	20,728	65,801	294	23,544	111,882
1880	1,704	48,787	178,784	1,206	57,142	287,623
1881	2,563	64,744	225,524	7,262	110,636	410,729
1882	2,865	68,745	288,221	9,689	129,294	498,814
1883	2,265	56,840	188,375	26,174	90,209	363,863
1884	2,184	50,905	160,159	19,778	75,483	308,509
1885	1,930	37,407	121,564	8,950	56,531	226,382
1886	1,943	35,289	117,546	201	45,725	200,704

FEMALES.

1873	239	1,302	16,143	3,497	162,830	184,011
1874	330	1,399	12,530	3,179	106,667	124,114
1875	279	1,789	10,814	1,036	73,630	87,548
1876	218	1,185	6,696	569	49,532	58,200
1877	211	862	5,534	386	42,831	49,824
1878	185	725	6,397	600	44,353	52,210
1879	124	634	7,252	603	57,331	65,944
1880	69	1,142	9,325	988	158,110	169,634
1881	249	1,713	18,968	678	236,894	258,702
1882	127	3,919	22,280	930	262,922	290,178
1883	185	5,665	27,674	20,486	185,449	239,459
1884	100	4,156	24,036	11,887	169,904	210,083
1885	167	2,410	20,138	6,448	139,801	168,964
1886	135	1,233	20,105	295	111,731	133,499

TOTAL BOTH SEXES.

1873	459,803	1880	457,257
1874	313,339	1881	669,431
1875	227,498	1882	788,992
1876	169,986	1883	603,322
1877	141,857	1884	518,592
1878	138,469	1885	395,346
1879	177,826	1886	334,203

Immigrants from European countries, according to age, year ending June 30, 1886.

Nationality.	Under 15 years.		15 and under 40.		40 and upwards.	
	No.	*Pr. ct.*	*No.*	*Pr. ct.*	*No.*	*Pr. ct.*
United Kingdom	19,437	17.2	82,021	72.8	11,090	10.
England	10,178	20.4	33,784	67.8	5,810	11.8
Ireland	6,419	12.9	39,369	79.1	3,831	8.
Scotland	2,608	21.5	8,168	67.3	1,350	11.2
Austria	5,238	18.2	20,330	70.9	3,112	10.
Belgium	300	23.0	810	62.7	184	14.
Denmark	1,097	17.6	4,562	73.2	566	9.
France	476	14.8	2,392	72.0	450	13.7
Germany	21,012	24.9	53,186	63.0	10,205	12.1
Italy	3,719	17.4	14,832	69.6	2,744	13.
Netherlands	669	28.9	1,301	56.2	344	14.
Norway	2,590	20.3	8,655	67.8	1,514	11.
Portugal	21	8.8	199	83.0	18	7.
Russia	5,404	24.8	14,370	66.1	1,965	9.1
Spain	46	18.3	245	71.2	53	15.
Sweden	4,189	15.1	21,218	76.4	2,349	8.
Switzerland	950	19.8	3,307	68.8	548	11.4
Total	65,839	19.8	227,981	69.3	35,208	10.

The following tables show what proportion of skilled labor each of the principal nations of Europe supplies, and the diagram based upon these tables will give some idea of the fluctuations which have occurred in this proportion :

Years.	Occupations.						Per cent. of skilled labor.
	Professional.	Skilled.	Miscellaneous.	Not stated.	Without.	Total.	
ENGLAND.							
1873	702	12,237	23,348	757	37,757	74,801	16.
1874	346	8,227	15,543	258	26,531	50,905	16.
1875	428	7,969	12,074	70	19,589	40,130	19.
1876	355	4,942	6,900	10	12,157	24,373	20.
1877	361	3,276	5,690	38	9,796	19,161	17.
1878	216	3,130	5,058	62	9,939	18,405	17.
1879	266	4,649	7,254	78	11,936	24,183	19.
1880	314	10,820	18,868	265	29,687	59,454	17.
1881	407	9,299	20,268	321	34,822	65,177	14.
1882	541	11,284	27,346	189	43,034	82,394	13.
1883	413	9,305	18,105	1,200	34,117	63,140	14.
1884	381	9,453	17,392	790	27,902	55,918	16.
1885	387	7,899	15,358	304	23,384	47,332	16.
1886	522	8,103	17,075	98	23,969	49,767	16.
IRELAND.							
1873	217	4,032	37,527	185	35,383	77,344	5.
1874	163	2,821	24,326	124	26,273	53,707	5.
1875	129	2,598	16,692	32	18,511	37,957	6.
1876	136	1,062	8,116	19	9,642	19,575	7.
1877	89	1,326	6,073	4	7,077	14,569	9.
1878	102	923	7,196	1	7,710	15,932	5.
1879	127	1,210	9,306	3	9,367	20,013	6.
1880	135	3,204	38,560	1	29,703	71,603	4.
1881	130	2,692	36,386	24	33,110	72,342	3.
1882	134	4,485	38,867	17	32,929	76,432	5.
1883	139	5,090	41,565	246	34,446	81,486	6.
1884	113	4,170	31,740	264	27,051	63,344	6.
1885	176	2,895	27,452	34	21,298	51,795	5.
1886	111	2,186	27,613	6	19,703	49,619	4.
SCOTLAND.							
1873	242	3,579	2,802	41	7,177	13,841	25.
1874	125	2,433	2,566	22	5,283	10,429	23.
1875	131	1,690	1,773	2	3,714	7,310	23.
1876	101	1,246	1,182	5	2,048	4,582	27.
1877	60	1,266	919	1	1,880	4,135	30.
1878	39	690	984	3	1,786	3,502	19.
1879	47	1,516	1,287	8	2,367	5,225	29.
1880	59	3,260	3,193	....	6,128	12,640	25.
1881	93	3,382	4,134	28	7,531	15,168	22.
1882	100	4,659	4,922	66	9,190	18,937	24.
1883	55	2,343	3,630	248	5,583	11,859	19.

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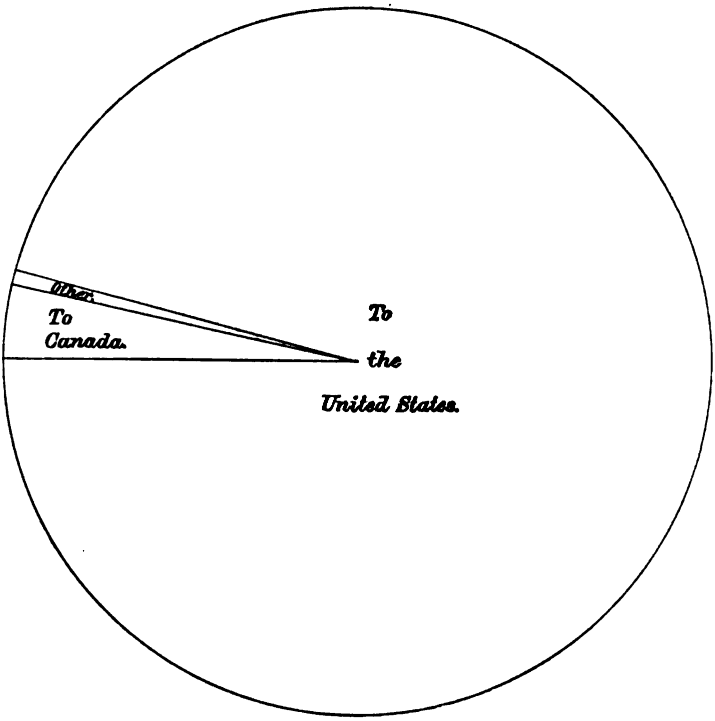
DISTRIBUTION OF EMIGRATION FROM DENMARK IN 1884.



Years.	Occupations.						Per cent. of skilled labor.
	Professional.	Skilled.	Miscellaneous.	Not stated.	Without.	Total.	
SCOTLAND—continued.							
1884	61	1,885	2,632	114	4,368	9,060	20.80
1885	72	1,994	2,794	40	4,386	9,226	21.61
1886	129	3,186	3,470	....	5,341	12,126	26.29
AUSTRIA.							
1873	23	496	1,383	497	3,366	5,765	8.60
1874	39	848	1,815	822	4,364	7,888	10.75
1875	42	918	1,481	81	4,360	6,882	13.33
1876	51	613	1,336	94	3,552	5,646	10.86
1877	83	438	1,282	41	3,229	5,023	8.71
1878	58	521	1,175	42	2,708	4,504	11.57
1879	27	553	1,449	32	3,270	5,331	10.37
1880	101	1,060	3,079	29	8,635	12,904	8.21
1881	49	1,401	5,154	159	14,346	21,109	6.63
1882	125	1,219	4,298	9	7,968	13,619	8.95
1883	64	1,208	4,052	12	5,587	10,923	10.97
1884	49	1,109	5,752	11	6,613	13,534	8.19
1885	52	772	4,794	....	5,956	11,574	6.67
1886	51	1,012	5,569	4	5,310	11,946	8.47
BELGIUM.							
1873	10	157	383	4	622	1,176	13.35
1874	26	183	227	1	430	817	16.28
1875	22	164	152	....	277	615	26.66
1876	20	164	204	....	127	515	31.84
1877	17	173	174	1	123	488	35.45
1878	11	61	100	1	181	354	17.23
1879	10	68	181	....	253	512	13.28
1880	9	138	319	....	766	1,232	11.20
1881	9	219	564	....	974	1,766	12.40
1882	27	181	344	....	879	1,431	12.64
1883	17	274	374	3	782	1,450	18.90
1884	30	269	465	61	751	1,576	17.06
1885	26	254	400	43	930	1,653	15.36
1886	29	264	365	15	627	1,300	20.30
DENMARK.							
1873	24	537	2,188	11	2,171	4,931	10.89
1874	24	400	1,108	2	1,548	3,082	12.98
1875	16	401	819	....	1,420	2,656	15.09
1876	16	232	545	....	754	1,547	15.00
1877	26	177	626	....	866	1,695	10.44
1878	6	184	913	1	1,001	2,105	8.74
1879	16	275	1,630	1	1,552	3,474	7.91
1880	10	532	3,125	....	2,909	6,576	8.80
1881	33	731	3,751	....	4,602	9,117	8.01
1882	30	967	5,200	....	5,421	11,618	8.32
1883	27	1,046	4,270	189	4,787	10,319	10.13
1884	30	861	3,292	579	4,440	9,202	9.35
1885	31	613	2,271	140	3,545	6,100	10.04
1886	28	745	2,794	....	2,658	6,225	11.96
FRANCE.							
1873	279	1,610	6,122	417	6,370	14,798	10.87
1874	381	1,714	3,285	251	4,012	9,643	17.71
1875	346	1,956	2,984	64	2,971	8,321	23.50
1876	468	2,000	2,666	40	2,828	8,002	24.99
1877	283	1,702	1,600	31	2,240	5,856	29.06
1878	156	697	1,511	41	1,754	4,159	16.76
1876	242	876	1,335	34	2,168	4,655	18.81
1880	97	628	1,315	25	2,248	4,313	14.56
1881	268	886	1,913	29	2,131	5,227	16.93
1882	199	943	1,931	36	2,894	6,003	15.70
1883	225	943	1,545	108	2,000	4,821	19.56
1884	107	830	1,200	122	1,349	3,608	23.00
1885	129	794	1,264	164	1,142	3,493	22.73
1886	82	658	1,165	94	1,319	3,318	19.83
GERMANY.							
1873	826	15,016	45,075	1,744	87,010	149,671	10.03
1874	723	9,776	25,983	1,124	49,705	87,291	11.18
1875	528	6,605	14,033	191	26,412	47,769	13.82
1876	584	4,351	9,572	224	17,206	31,937	13.62
1877	416	4,261	8,674	80	15,867	29,298	14.54
1878	456	4,177	9,700	193	14,787	29,313	14.25
1879	383	4,665	11,666	225	17,663	34,602	13.46

Years.	Occupations.						Per cent. of skilled labor.
	Professional.	Skilled.	Miscellaneous.	Not stated.	Without.	Total.	
GERMANY—continued.							
1880	455	10,877	26,120	887	46,299	84,638	12.86
1881	880	24,030	63,002	648	121,925	210,485	11.41
1882	885	26,527	67,432	464	155,322	250,630	10.58
1883	857	25,190	51,282	296	117,161	194,786	12.93
1884	876	22,125	51,638	150	104,887	179,676	12.31
1885	751	12,990	35,148	139	75,420	124,443	10,44
1886	554	9,295	24,916	15	49,623	84,403	11.01
HUNGARY.							
1873	7	177	264	....	899	1,347	13.14
1874	8	118	288	....	548	962	12.26
1875	22	88	217	....	449	776	11.34
1876	10	69	221	....	330	630	10.95
1877	6	52	115	....	200	373	13.93
1878	5	86	182	13	360	646	13.31
1879	13	84	187	....	348	632	13.29
1880	43	375	1,967	....	1,978	4,363	8.50
1881	11	298	3,231	....	3,286	6,826	4.36
1882	13	237	5,199	....	3,480	8,929	2.65
1883	16	260	7,277	....	3,687	11,240	2.31
1884	14	470	9,445	....	4,869	14,798	3.17
1885	18	226	4,768	....	4,371	9,383	2.41
1886	13	598	7,917	....	3,892	12,420	4.81
ITALY.							
1873	117	537	5,313	60	2,688	8,715	6.16
1874	185	435	4,957	176	1,843	7,596	5.72
1875	166	492	1,828	7	1,077	3,570	13.78
1876	170	437	1,415	1	887	2,910	15.01
1877	195	304	1,485	71	1,088	3,143	9.67
1878	145	322	2,055	19	1,590	4,131	7.79
1879	213	437	2,969	41	2,099	5,759	7.54
1880	148	513	5,820	177	5,669	12,327	4.16
1881	292	1,490	8,454	44	5,098	15,387	9.74
1882	324	2,652	20,299	60	8,742	32,077	8.27
1883	201	2,629	23,140	281	5,533	31,784	8.27
1884	223	1,774	8,464	909	5,103	16,473	10.77
1885	156	1,384	6,291	300	5,468	13,599	10.18
1886	205	2,003	9,990	181	8,916	21,295	9.41
NETHERLANDS.							
1873	10	258	1,200	7	2,329	3,811	6.77
1874	19	217	687	1	1,520	2,444	8.88
1875	14	112	360	1	750	1,237	9.05
1876	11	96	224	....	524	855	11.22
1877	18	47	150	....	376	591	7.95
1878	16	69	181	....	342	608	11.18
1879	13	54	186	....	500	753	7.17
1880	8	139	908	....	2,285	3,340	4.16
1881	10	332	2,478	....	5,777	8,597	3.86
1882	14	591	2,263	....	6,649	9,517	6.21
1883	15	259	1,384	....	3,591	5,249	4.93
1884	15	282	1,145	1	2,755	4,198	6.71
1885	25	250	784	....	1,630	2,689	9.29
1886	29	189	739	9	1,348	2,314	8.17
NORWAY.							
1873	132	1,653	5,170	54	9,238	16,247	10.17
1874	21	2,223	3,009	2	5,129	10,384	21.40
1875	52	1,179	1,671	....	3,191	6,093	19.35
1876	35	735	2,228	2	2,173	5,173	14.20
1877	51	585	1,766	....	2,186	4,588	12.75
1878	9	659	1,647	....	2,444	4,759	13.85
1879	2	730	3,267	....	3,346	7,345	9.94
1880	37	1,567	8,997	....	9,294	19,895	7.88
1881	32	1,474	9,028	717	11,454	22,705	6.49
1882	26	1,526	12,390	288	14,871	29,101	5.24
1883	48	1,533	7,132	5,835	8,850	23,398	6.55
1884	36	1,137	5,527	3,195	7,079	16,974	6.69
1885	30	785	4,584	1,029	5,928	12,356	6.41
1886	33	972	5,748	....	6,006	12,759	7.62
PORTUGAL.							
1873	....	5	9	....	10	24	20.83
1874	....	12	26	1	21	60	20.00
1875	....	393	4	....	306	703	51.50
1876	28	182	32	....	229	471	38.64
1877	5	704	80	....	493	1,291	54.53
1878	1	112	235	1	311	660	16.96

Years.	Occupations.						Per cent. of skilled labor.
	Professional.	Skilled.	Miscellaneous.	Not stated.	Without.	Total.	
PORTUGAL—continued.							
1879	4	102	148	....	138	392	26.02
1880	9	71	58	....	122	260	27.03
1881	2	15	57	....	97	171	8.77
1882	....	1	22	1	18	42	2.38
1883	....	41	115	....	20	176	23.38
1884	....	97	510	....	94	701	13.83
1885	....	73	290	24	52	440	16.60
1886	....	23	139	....	76	238	9.63
RUSSIA.							
1873	14	148	455	2	941	1,560	9.48
1874	19	751	866	13	2,311	3,960	18.20
1875	16	505	1,761	2	5,698	7,982	6.32
1876	15	316	1,453	6	2,974	4,764	6.63
1877	35	508	1,762	5	4,269	6,579	7.72
1878	14	236	794	67	1,926	3,037	7.77
1879	22	281	1,142	....	2,989	4,434	6.33
1880	6	645	1,787	....	2,416	4,854	13.29
1881	18	411	1,796	1	2,639	4,865	8.44
1882	63	1.220	6,821	28	8,189	16,321	7.47
1883	28	457	3,021	1,146	4,534	9,186	4.97
1884	30	1,098	5,244	....	5,482	11,854	9.51
1885	55	1,206	5,698	....	9,644	16,603	7.26
1886	53	1,693	6,727	7	8,829	17,309	9.78
SPAIN.							
1873	19	31	282	78	131	541	5.73
1874	10	95	183	48	149	485	19.59
1875	15	68	267	2	249	601	11.31
1876	20	78	232	7	181	518	15.05
1877	22	70	299	25	249	665	10.52
1878	12	39	255	11	140	457	8.53
1879	14	48	231	36	128	457	10.50
1880	34	26	209	2	118	389	6.70
1881	11	65	104	27	187	484	13.41
1882	18	31	158	20	151	378	8.57
1883	7	40	130	6	79	262	15.27
1884	8	49	127	31	85	300	16.33
1885	6	42	163	1	138	350	12.00
1886	12	51	138	19	124	344	14.82
SWEDEN.							
1873	46	1,699	5,599	10	6,949	14,303	11.88
1874	10	406	2,370	14	2,912	5,712	7.10
1875	10	743	2,121	1	2,698	5,573	13.33
1876	13	719	2,331	....	2,540	5,603	12.84
1877	15	396	1,931	1	2,648	4,991	7.93
1878	12	521	2,359	1	2,497	5,390	9.66
1879	27	1,051	5,422	....	4,501	11,001	9.55
1880	17	2,801	20,019	....	16,349	39,186	7.14
1881	35	2,697	23,188	761	23,079	49,760	5.42
1882	34	3,162	32,067	522	28,822	64,607	4.91
1883	39	2,611	17,055	2,471	16,101	38,277	6.82
1884	23	1,763	11,899	1,696	11,171	26,552	6.64
1885	32	1,341	9,635	1,290	9,950	22,248	6.02
1886	36	1,778	15,714	....	10,223	27,751	6.40
SWITZERLAND.							
1873	32	332	1,064	63	1,616	3,107	10.68
1874	32	317	1,158	9	1,577	3,093	10.24
1875	16	214	719	1	864	1,874	11.80
1876	15	316	553	....	668	1,549	20.40
1877	28	315	674	2	667	1,686	18.70
1878	30	355	702	2	719	1,808	19.63
1879	61	591	1.197	3	1,319	3,161	18.70
1880	43	1,122	1,987	....	3,004	6,156	18.06
1881	141	2,588	3,270	32	5,262	11,293	22.91
1882	124	2,241	3,297	11	5,171	10,844	11.44
1883	94	2,244	3,831	81	6,501	12,751	17.59
1884	80	1.563	2,761	33	4,949	9,896	16.68
1885	64	1,046	2,019	6	2,760	5,895	17.74
1886	46	740	1,579	18	2,422	4,805	15.40

In order to show from what countries the higher forms of skilled labor are obtained the following tables have been prepared, but they must be far from perfect:

Occupation and nationality.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Boat-builders:														
England	2			24				1	2	2			1	1
Ireland	1	3									3		1	
Scotland			2	3				2			1			
Wales										1				
France	1						1							
Germany														
Italy										2				
Norway				1						1				
Portugal	1													
Sweden	1										1			
Switzerland								1		7				
Boiler-makers:														
England	50	17	30	12	5	7	20	131	15	10	13	26	20	15
Scotland	29	21	12	6	4	10	7	45	10	12	15	15	14	20
Ireland	11	7	34	17	38	7	1	6	5	8	2	2	7	7
Wales		1	2			1			1					
Belgium	1												1	
Denmark		1		1										
France			1							1	1			
Germany	2	1	25		1	1	2	1	11	10	5	1	1	
Italy									1	1			1	
Norway			1	36	37									
Poland	1								1					1
Russia					26									
Sweden			1		1	1			1	6				
Switzerland				1					2	1	1			
Spain														1
Book-binders:														
England	50	9	25	10	7	7	8	7	13	14	15	17	20	12
Ireland	3	7	5	3	1		1	1	3	5	2	2	3	2
Scotland	4	2	55	16	1	2	5	7	7	6	8	2	7	7
Austria	1	6	11	2	2	1	5	3	9	4	4	3	2	10
Bohemia												2	2	1
Hungary	3							3	2		1	1		2
Belgium		1		21	6		1			1				
Denmark	1			1		1		1	3	8	7	1	1	3
France	70	1	89	3	26	1	16	8		1	2	2		
Germany	121	140	82	26	52	21	23	27	92	101	127	176	92	60
Italy	1			1		1		2	1	3	8		2	2
Netherlands	1	1									1			1
Norway	1	10	24	33	17	6				5	3		2	2
Portugal				20										
Roumania													1	
Russia				1		2	1	3	4	10	7	13	12	12
Poland	1	4		1		1								1
Spain														2

Sweden			1	5	1		7	9	2	8	2	8	1	1
Switzerland	1	9		1	2		2	9	10	17	23	9	7	2
Wales	1													
Brass-workers:														
England	24	10	11	17	9	4	8	8	13	13	11			
Ireland	1	1	6	2	2	2	1	2	1	3	1			
Scotland	5	4	1	10	5	2	3	7	11	12	7			
Wales				1										
Austria		3	4								1			
Hungary										1				
Belgium				11	10					1				
Denmark					1									
France	8			2	29				1					
Germany	6	10	9	5	4	2	2	3	10	2	24			
Italy	1								1	5				
Netherlands				1										
Norway					20		7							
Russia			1											
Sweden	2				1	1			2	1				
Switzerland						1		2		8	2			
Brush-makers:														
England	11	2	3	3	2	1	2	5	1	1	4	2	1	4
Ireland		1	14	7	2	1	1	5	1			1		
Scotland			2		2	2		2	2	1		1	1	2
Austria	1						1			2		1		4
Hungary								1					1	
Belgium									1					
Denmark										1				
France									1	1	2		2	
Germany	9	4	1	2	1	3	1	5	8	16	9	15	10	6
Netherlands													1	
Poland										1				
Portugal				8	21									
Norway		1		8						1				
Russia								4	1	5	1	7	7	5
Sweden								2	1					
Switzerland		1					2			1		2		
Button-makers:														
England	3	4	1	2	2	2	2	2	1		1			
Ireland								1						
Austria			1							1				
France			85	42	20									
Italy									1					
Norway				29										
Sweden									1					
Germany	1	2	4		1			1	3	2				2
Calico-printers:														
England	2	1	6			1	2		1	1				
Scotland	4		1	1		1		1	1		1			
Ireland		1			1					2				
Wales				1										
Germany										1				

Occupation and nationality.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Cap-makers:														
England						1				1	1	1	1	1
Ireland	1	1										1		
Austria	1		1				3			1				2
Hungary								8						
France					25									
Germany	5	1	8		46		2		16	2	2	8		13
Italy													1	8
Netherlands											1			
Norway				6					1					
Poland	1						1					4		6
Russia	2							1		1		1	2	15
Sweden									1					
Switzerland	1							2						
Carders:														
England	5	4	5	2	2	6	2		1	4	9	5	2	8
Ireland	1	1			3							1		
Scotland	8	1		4	25				1	1			1	
Wales		1												
Germany			10	4	18				1					
Italy											4			
Norway				4	22					8				
Switzerland							2							
Coal-miners:														
England	147	172	85	21	40	10	45	83	22	28	21	8	5	11
Ireland	46	14	7	3		1	4	8	1	1	5	6	2	1
Scotland	8	12	8	1	4	2	2		1		8	1		
Wales	8	27	9	9	4	1	8	11	8	1	11	5		
Austria	4													
Belgium							1							
Denmark	2						1							
France	5	2	1	1										
Germany	54	104	8											
Italy	11					1								
Netherlands	1													
Norway	1									1				
Russia					28									
Sweden	138	1												
Coppersmiths:														
England	5	4	8	3	8			7	5	10	13	7	8	8
Ireland			4								1		2	
Scotland	1	2		10				1		1				2
Austria			2	1			1		1	1		1	1	1
Hungary									1				1	
Belgium			17					2						
Denmark		1					1			1	2			1
France			7	11	20	1	1						8	2

Germany	9	12	7	2	7	5	9	8	41	34	20	21	25	18
Italy	15	8		1	1					4	4	1	8	4
Netherlands		1							1	2		1	1	
Norway	1			12		8			1					
Poland	1									1				
Sweden							1	1	1					2
Switzerland									3	8	4	2	8	3
Russia		1	1		1					1	1		1	5
Cutlers:														
England	132	02	24	11	0	6	7	104	28	28	86	25	40	28
Ireland	3	1		1	1	2	1	4	4		4			2
Scotland								3	2	4	7		5	2
Wales												1	1	
Austria		1						3		1	2	1	2	
Hungary							1							
France			1				2	5	3	2			2	1
Germany	8	7	31	3	3	4	5	7	26	14	14	30	7	6
Italy	2					1	1			10		1	2	1
Neterlands								1				1		
Norway							1			1				
Portugal					9									
Russia												3	1	1
Spain											2			
Sweden		1			1				4	5		2		
Switzerland							2	2	1	4	4	3	1	1
Belgium													1	
Poland												2		
Dyers:														
England	25	21	23	7	19	12	13	47	29	43	55	59	30	
Ireland	12	1	2	7	2	1	2	9	4	4	5	3	6	2
Scotland	24	12	5	8	4	10	6	29	12	20	9	10		21
Austria	1	2	3	2	8	2	1	1	2	5	5	3	5	1
Hungary						1		1	1	1	4	2		
Bohemia											2	3		1
Belgium	1			1		1		1		2	1			1
Denmark					1			8			9	4		1
France	1	3	9	7	18	5	10	6	13	12	13	9	4	6
Germany	32	25	21	13	24	12	12	21	43	57	121	64	80	25
Italy	1	2			2			4	2		4	1	2	7
Netherlands														1
Norway	1			1		2		12		1	1			
Portugal				12										
Roumania													1	
Russia	2				1	1		8		9		2	6	2
Finland													1	
Poland									1				1	
Spain									2					
Sweden	1				2	8	1	8	7	5	7	8	1	8
Switzerland	1		1	4		5	7	1	14	28	12	8	3	2
Engine-makers:														
England	23	24	18	9	5	7	5	12	7	17	5	4		2
Ireland	2		2	1	1			2	1	1	2			1

Occupation and nationality.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Engine-makers—Continued.														
Scotland	4	9	1	5	2		2	1	7	2	1	2	1	4
Wales			1											
Denmark						2								
France														
Germany	2	1	1							1				
Netherlands		1												
Switzerland								1						
Sweden														1
File-makers:														
England	1	5	10	1	1			1			5	1		3
Scotland	1			1	8			1						
Ireland	1		2										1	
Wales		1												
Austria													1	
Bohemia												1	1	
France				14										
Germany	2		1						2		1	6	1	
Norway		46					3		1					
Russia		37							2					
Sweden					1					4				
Switzerland											1			
Flax-dressers:														
England	2	3	2		2	1		3	4	3	1		1	1
Ireland	39	5	52		11	1	1	12	13	66	9	7	14	12
Scotland	7	4	3	1	2	1	8	15	10	6	3	3	6	6
France			32	3	4				1					
Germany	1													
Norway			23											
Glove-makers:														
England	18	1	7	4	3	4	1	9	12	3	1	2	1	5
Ireland				2				3	4				1	
Scotland						1								
Austria	1	3	2					1						1
Hungary			1								2			
Belgium					16		1	1	1		2			
Denmark	1	1		2							1	1		1
France	71	2	58	122	82	24	1	15	17	2		2	2	1
Germany	5	10	125	7	1	3	7	16	4	12	18	5	6	5
Italy	1								9	9	1		1	2
Norway		55		2			8							
Portugal				40	13									
Russia		1											6	6
Poland		1						3						
Sweden					3		7				1		1	1
Switzerland		1			3							1		

Gunsmiths:														
England	20	4	9	18	6	5	4		10	7	6	4	5	8
Ireland	2	1			1	1	2	1	1	2		2	1	2
Scotland	1	1	1	1	1						1	1	1	
Austria					1				1	1				
Hungary				1										
Belgium	1		2	2	1	1	1					1		
Denmark		1												
France	7						1			2	1	1	2	1
Germany	21	6	5	7	84	14	8	5	21	4	4	2	5	1
Italy	1				1				1	2	1	2		1
Norway	1	15	1	3		6						1	1	
Spain				1										
Sweden	1	2					1				8			1
Switzerland	1			1			1		1				1	1
Russia				1							1			1
Hatters:														
England	34	28	24	11	10	14	19	29	55	41	23	35	15	29
Ireland	10	5	9	8	1	6	4	5	8	4	6	2	3	1
Scotland	8		5	4	80	8	6	6	4	9	4	1	8	1
Wales			1	1			1				1			
Austria	1	2	4	2	1	2	4	4	5	2	4	15	7	10
Hungary	4					3		3	4	1	2	1	3	
Bohemia											2	2		
Belgium			1				1		1	8	2			
Denmark			3						1	4	2	1	2	1
France	9	5	67	48	11	8	6		7	5	5	4	5	6
Germany	54	25	25	10	10	11	13	80	64	64	98	47	89	86
Italy	4		1	2	1	2	1	10	10	12	62	8	28	31
Netherlands	1									1				
Norway	1		1	8		8	20	18	1	8	2	1		1
Roumania												3	2	
Russia	1			1		8		1	2	7	10	16	9	13
Poland	4					1	1	8	1	2	8	4		4
Sweden		1			2	1	1	6	2	2	8	5	2	2
Switzerland	2				8	2	2	2	9	8	6	2	5	2
Turkey	1													
Iron-founders:														
England	11	8	2	2	4	8	5	15	6	4	12	7	10	17
Ireland			2	3		1		2		1	1	1	2	2
Scotland	4	3	2	1	1	1		2	5	5	1	8	2	4
Wales									2	1				
Austria			1								2			
Belgium									2					
Denmark									2			1		
France		1		8	1		1	2	1	2	1		1	2
Germany	2	1				1		4	12	10	22	5	7	4
Italy											8		1	
Netherlands						1				1				8
Russia					87									
Sweden			2	1	1		1			1	2			
Switzerland						2	2	2	12	1	2	2	2	1

Occupation and nationality.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Iron-miners:														
England	133				37									
Denmark	91													
Germany		73												
Norway	360	236												
Russia	90		135	104	12	60								
Sweden	156		1	12										
Iron-molders:														
England	99	65	129	122	26	14	38	132	142	86	79	69	28	65
Ireland	28	15	14	12	6	4	6	29	20	21	13	13	15	9
Scotland	167	20	21	12	29	4	17	89	51	70	23	25	31	40
Wales	1		1							1		1		
Austria								1						
Belgium			1				1	2						2
Denmark	46	25		2		1	1		5	4			3	3
France	1	1	4	1	2		2	1	3		3	5	2	4
Germany	5	60	3	28	5	3	3	9	26	9	11	20	12	6
Italy			4	3			3	8	3	4	6	22	33	33
Netherlands				1				1				1		
Norway	228	218	28		18	1		1	2	2		1		
Russia		58	40		20							1		
Poland		1		1						3		2		
Spain			1	2										
Sweden	10		23	49	2			11	8	3	3	1	8	4
Switzerland				1			1	3	5	5			1	3
Iron-puddlers:														
England	28	16	7	13	5	2	4	45	12	21	21	12	6	7
Ireland	8	10	3	11	5	4	8	10	3	4	7	1	3	6
Scotland	12	2	1		7		1	7	6	5	2	3	3	3
Wales	2	2			1			2				1	2	
Austria									1					
Hungary								1						
France					1									
Germany	4	2			1			2	4	6	3	3	1	10
Netherlands										1				
Norway									8					
Sweden								1	2		2			
Switzerland									1					
Iron-turners:														
England	6	4		1	1		1	8	4	3	6	1	2	1
Ireland	1	1	1					2						
Scotland	6	2			1		1	11	6	8	1	1	2	5
Austria		1					1			3				
Germany		1						1	2	4	4	7	5	1
Sweden										1				

Iron workers:														
England	28	9	33	14	31	0	5	66	26	34	27	38	21	37
Ireland	13	4	8	3	3	......	......	7	3	6	8	7	9	14
Scotland	10	3	8	1	2	5	9	15	7	10	0	13	17	20
Wales	......	......	......	......	......	......	......	4	8	1	2	3	8	......
Austria	......	......	1	......	......	......	......	......	......	1	3	1	......	2
Belgium	......	......	......	......	......	......	......	......	......	2	1	......	......	......
Denmark	......	......	......	......	......	......	......	......	......	......	......	......	......	1
France	1	......	1	2	2	......	......	......	......	......	......	1	......	......
Germany	8	6	2	6	1	1	......	11	5	22	11	11	5	4
Italy	......	......	......	......	......	......	......	......	3	3	4	1	......	......
Netherlands	......	......	......	......	......	......	......	......	......	1	......	1	......	......
Iron workers:														
Norway	......	46	......	......	28	......	1	......	1	......	......	......	......	......
Russia	......	65	......	......	24	......	......	......	......	......	......	1	1	......
Sweden	......	......	108	......	......	......	2	9	5	2	1	......	1	9
Switzerland	......	......	......	......	......	......	......	......	......	3	......	......	......	......
Jewelers:														
England	71	30	53	34	13	20	31	42	60	58	35	40	54	40
Ireland	6	4	1	3	2	1	4	4	5	4	1	0	7	4
Scotland	10	3	7	3	39	5	2	3	4	2	3	2	2	4
Wales	......	......	......	......	......	......	......	1	......	......	......	......	......	......
Austria	11	5	8	1	1	4	7	......	8	8	5	5	7	3
Hungary	1	4	2	3	3	1	1	4	......	2	1	7	......	1
Bohemia	......	......	......	......	......	......	......	......	......	......	1	1	......	......
Belgium		......		1	1	1	......	......	3	2	4	1	1	......
Denmark	......	1	......	......	......	1	......	6	2	2	7	......	......	2
France	38	94	111	51	38	18	13	3	16	21	5	8	13	6
Germany	53	52	56	42	41	29	48	143	139	110	84	79	30	36
Greece	......	......	......	......	......	......	......	......	......	......	......	......	1	1
Italy	10	7	9	3	1	1	3	0	8	14	12	16	10	5
Netherlands	1	......	2	......	......	......	1	2	1	4	3	......	1	1
Norway	3	3	2	......	2	......	2	10	4	4	5	2	......	3
Portugal	......	......	......	......	......	......	......	1	......	......	......	......	......	......
Roumania	......	......	......	......	......	......	......	......	......	......	......	......	2	1
Russia	2	1	......	2	2	1	1	1	3	18	10	11	14	26
Poland	9	3	3	1	3	2	......	......	1	2	......	3	1	......
Sweden	1	......	1	1	5	4	......	12	5	2	2	2	4	1
Switzerland	4	8	......	1	1	5	6	13	41	19	6	2	4	6
Lace manufacturers:														
England	1		1	2	......	2	2	......	4	3	8	4	7	17
Ireland	1	......	......	......	......	1	......	......	......	......	......	......	......	......
Scotland	......	......	......	......	......	......	......	......	......	......	......	......	1	......
Austria	1	......	......	......	......	......	......	......	1	......	......	1	......	1
Belgium	......	......	......	......	......	......	......	......	1	......	......	1	......	......
France	......	......	......	3	2	......	2	......	3	3	......	......	6	2
Germany	4	4	1	......	2	1	1	4	4	3	4	17	5	2
Italy	......	......	......	......	......	......	......	......	3	2	......	......	......	......
Netherlands	......	......	......	......	......	......	......	......	1	......	......	......	......	......
Russia	......	......	......	......	......	......	......	......	......	......	......	1	2	......
Poland	......	......	......	3	......	......	......	......	......	......	......	1	......	......
Sweden	......	......	......	......	......	......	......	......	......	......	......	......	1	......

Occupation and nationality.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Lace manufactures—Continued.														
Switzerland		1		1	1	1		6	9	6	1	6	8	3
Lapidaries:														
England	1			1	1				1					
Ireland				1										
Belgium					1							3		
France						1	1				3			
Germany	1	4						1	2					
Italy			1											
Netherlands			1											
Poland	2		1											
Sweden		1			1									
Machinists:														
England	162	106	153	74	60	119	66	167	97	88	70	100	144	86
Ireland	9	19	17	9	10	11	12	22	14	25	10	6	15	9
Scotland	68	14	25	10	132	68	13	48	86	60	23	16	15	27
Wales							1						1	
Austria	3	1	6		5	1	2	4	3	2			4	2
Hungary		1		2								1		
Belgium		1	2	3			1		1		2	1	1	3
Denmark	2	4	6	6		8	2	6	4	5	4	17	7	1
France	5	6	12	8	15	4	4	1	11	4	6	7	3	4
Germany	43	33	35	34	18	21	22	40	141	59	41	59	54	36
Greece		1							1					
Italy	1	1	2		3					1	1		3	1
Netherlands				2				1	1	3	1			
Norway	21	29	9	2	1		4	62	12	5	3	1	2	2
Russia			1	1		1			1	2	1	2	5	12
Poland	2	1		2						2				2
Finland													1	
Spain		4	1	1				1	20	1		1		
Sweden	1	1	6	11	8	6	9	25	52	13	11	8	7	5
Switzerland	3	1	1	3	1	2	2	1	17	4	7		7	8
Metal rollers:														
England	4	5	5	1	2	3		20	3	7	2	3	3	6
Ireland	3	1	1					1	1					
Scotland			1			1		3	1	1				
Wales		1		4	1									
Austria									1		1			
Germany	2							1	1	6	7	5	2	1
Mechanics, n. o. d.:														
England	974	390	208	160	97	106	268	885	1,185	1,703	718	737	701	727
Ireland	165	87	51	43	29	25	66	268	183	307	178	163	221	162
Scotland	106	34	17	6	5	15	28	124	136	179	149	90	149	200
Wales and Man	2	7	4		1		2	2	9	6	7	5	7	14

Austria	17	7	5	8	1	1	5	6	21	16	52	30	19	60
Hungary	12	1					1	1	6	1	6	6	8	4
Bohemia											2	2	2	4
Belgium	8	5	1	1				8	7	10	12	18	8	5
Denmark	27	4	2	1	3	11	12	8	8	42	18	82	24	18
France	82	12	30	85	23	8	14	38	45	74	68	42	30	50
Germany	540	193	75	84	24	53	70	351	720	602	487	444	259	102
Greece:		1							1	4				
Italy	27	38	12	87	7	5	30	10	161	250	195	56	45	64
Netherlands	40	11	7			2		4	43	37	9	4	8	9
Norway	21	12		2	4	10	7	40	61	41	54	73	23	53
Portugal	1								4			2	4	2
Roumania													3	2
Russia	4	4	1		2		1	23	10	58	20	14	24	20
Finland	3	1						1	1	2	3		2	
Poland	58						1	4	60	13	3	8	4	8
Spain	1	2		5	5	4	2	5		2	7	4		5
Sweden	57	16	6	24	10	17	65	331	195	244	155	175	135	251
Switzerland	40	22	6	19	11	9	12	64	151	120	113	38	31	20
Millwrights:														
England	12	4	6	7		1	2	4	3	5	5		2	1
Ireland	5		1	1						2			2	
Scotland	9	3	2		2			2		4	15		3	
Austria								1						
Hungary		1						1						
Denmark	1									1				
Germany	1	4								4	3			
Italy									1					
Norway			1								1			
Miners, n. o. d.:														
England	2,731	1,780	1,797	926	548	604	1,050	2,168	1,442	2,098	1,415	1,606	1,214	1,350
Ireland	527	318	260	104	100	95	110	345	235	397	505	430	262	172
Scotland	264	476	341	112	60	71	463	620	1,031	1,312	538	338	277	346
Wales	60	25	65	49	38	36	71	184	159	168	181	83	140	182
Austria	12	24	36	30	24	23	19	37	42	93	220	20	27	39
Hungary	5	8		2			1	4	6	4	2	38	27	360
Bohemia										6	6	37	10	8
Belgium	51	4	4	1	3	8	4	15	43	43	49	15	32	43
Denmark	16	18	15	7	7	20	9	81	32		28	47	83	52
France	82	52	29	19	30	14	26	15	48	91	38	41	28	55
Germany	595	430	160	91	73	51	76	320	655	1,066	755	398	163	163
Greece					1	1			1					
Italy	74	26	79	27	14	31	34	40	132	354	448	200	181	343
Netherlands	3	6	5			1		2	4	39	0		1	1
Norway	263	344	278	59	66	203	192	451	275	161	55	45	95	49
Portugal		2												
Russia		147	250	23	65	37	5	242	9	11	9	1	6	20
Finland							1					4	3	1
Poland	24	16	5	4	1	1	1	11	11	83	3	12		9
Spain		1					1	1				283		5
Sweden	505	72	169	80	73	154	166	794	518	314	210	283	300	250
Switzerland	23	5	4	2	1	2	9	1	12	40	81	17	17	39

Occupation and nationality.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Nail-makers:														
England	1	4	4	1	2			1	2		3			
Ireland	6	3		2	1	1				3	1			
Scotland						1				3	2			
Wales				1										
France					1									
Germany	5		1	2					13	2	2			
Italy											1			
Norway				1										
Russia										1				
Spain								1						
Sweden				1										
Operatives, n. o. d.:														
England	30	68	19	16	19	51	63	53	44	69	102	68	73	44
Ireland	12	24	14	8	17	2	8	20	8	12	237	26	17	48
Scotland	26	10	17	5	5	4		14	23	94	11	41	10	60
Wales									5	1	6			
Austria			1											
Hungary										1				
Denmark										2		1	1	
France											3			
Germany	2	7	1						1	10	1	2	5	2
Italy								17			1		5	
Netherlands											1			
Norway			2										1	
Russia					1									
Poland										1				
Sweden										1	5	1		1
Switzerland										1		2		
Paper makers:														
England	17	8	6	3	2	3	2	11	15	10	14	10	14	8
Ireland	3	3	4	3	1	1	2	1	2			1		2
Scotland	9	6	4	3	1	1	3	7	6	9	7	6	6	9
Wales													1	
Belgium				2										
France											2	1		1
Germany	4	4	2		6		3	2	3	6	5	1		1
Italy											3	1		
Netherlands													1	
Norway		1	1											
Russia													2	1
Poland												1		
Sweden									2	1	1			
Switzerland											4	1		
Pattern makers:														
England	10	5	7	2	1	4	7	10	10	7	8	6	11	8
Ireland	2								1	1		2		1

Scotland	16	1	2	1		1	4	10	8	4	8	4	2	11
Wales													1	
Belgium													1	
Denmark												2		
France				1						2		2	1	2
Germany	1			1				4	1	8		2	3	1
Italy								2						
Norway							1	1						
Spain										2				
Sweden									1	5				
Switzerland								2	4					
Platers, n. o. d.:														
England	13	5		1	1	2	5	8	3	12	2	5	18	10
Ireland	1	2		1				2	1	1	5	8	1	2
Scotland	2							2		17		7	2	2
Wales		1												
Belgium													1	
France						2					1			
Germany	2									8			3	1
Norway									1					
Russia				1										
Italy										4				
Polishers:														
England	1	3	3	6	2	1	2	1	2	2	7	5	5	6
Ireland	1			3				1	2	2	1		1	
Scotland	1	2		3				1		1			3	1
Austria												1		
Belgium												1		
France	54		1			4		3						
Germany	7	1	1		1	1	1			5	3	3	1	2
Italy		1							1		2			
Poland	1			1								1		
Spain														
Sweden				4	1	1			1		1			
Switzerland						1								
Potters:														
England	22	30	15	6	8	4	12	80	47	16	21	82	83	40
Ireland	18	5	4	1	2		2	3		3	3	3	1	2
Scotland	6	7	2	2			1	6	6	8	5		4	12
Austria	1	1	1	3	1	4	2		1	1	5	3		1
Hungary	3	1	1									1		
Bohemia												6	2	2
Belgium				8						1			1	
Denmark	1							1					1	2
France						1								
Germany	21	19	8	2	4	3	8	29	10	32	109	57	14	5
Italy										3			2	1
Norway			22		1						1			2
Russia								1			2	1	5	3
Spain										1				
Sweden								1	1	1	4		1	
Switzerland						1			2		2		1	

Occupation and nationality.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Rope-makers:														
England	8	10	25	8	4	2		2	4	14	6	2	1	3
Ireland	2	8	15	8				1	2	1	1	1	2	2
Scotland	8	8	1			2	1			3	1	8		
Austria	2	1	1											1
Hungary										8	1			
Belgium			38											
Denmark							1	1	1	1	3	1		
France									1		2	2	3	2
Germany	11	14	13	2	21	2	2	6	10	61	32	21	2	7
Italy						1				2	1	2		
Netherlands				1						4				1
Norway					18	18			1	1		8		
Portugal					21									
Russia											2			
Poland									1	1		1		
Sweden	2		24	6			2	1	2	8	1			1
Switzerland				1			1		2	1	3	1		1
Saddlers:														
England	48	16	24	14	7	7	8	24	21	39	30	27	28	27
Ireland	31	29	8	9	4	8	4	10	10	17	7	14	15	13
Scotland	8	31	28	5			4	11	4	6	8	4	6	5
Wales				1										1
Austria	7	6	7	5	5	4	5	9	10	10	8	10	8	9
Hungary			1	1	1	5		5	6	4	8	4	1	1
Bohemia										3	10	9	7	14
Belgium			1				2	3	2	1		1		
Denmark	3	1	1	1	1	2	2	3	6	12	8	18	6	1
France	10	47	17	4	2			1	2	8	3	9	3	2
Germany	167	208	56	47	38	54	64	124	304	346	338	302	170	137
Italy	2			1	1				10	3	3	8	4	4
Netherlands	3	1		1			1				1	2	1	
Norway	1	14	2			1	1	1	1	7	5	9	7	6
Portugal						1		1						
Roumania												1	1	
Russia	4				1			11	2	6	5	11	6	15
Poland	4			1			1		1			1	8	4
Spain				1				1		2				
Sweden	4		1		2	1	2	3	9	7	4	8		4
Switzerland	3	5	1	4		2	10	11	29	35	35	31	11	11
Sailmakers:														
England	8	7	4	2	2	3	2	2	7	8	1	5	5	2
Ireland	1	2	1	2	1		1	1	1	2		1		
Scotland	2	2	2	1		2		2	1	1	3	1		1
Wales			1											
Austria													2	
Hungary												1		

Belgium		1									1			1
Denmark	1	2	8	4		2		1			1	1	1	1
France	1			18										
Germany	2		3	4	2	2	8	8	11	17	6	1	2	4
Italy											1			
Netherlands			1		1									
Norway		1				14			7		1	4	2	4
Russia			1							8	1			2
Finland							1							
Sweden			1	10		1	2	2	9	2	3	5	3	1
Switzerland			2						1					2
Shipwrights:														
England	64	21	34	8	9	5	4	11	9	13	2	8	6	6
Ireland	5	4	3	1	4		4	1	1			2	1	5
Scotland	2	3	8	4	4	2	2	17	115	4	6		5	3
Wales and Man			1				1							
Austria	1		1										1	
Hungary	3													
Belgium			1	1				1						
Denmark	1	1		1				15		2		2		1
France	7	2	2						1					
Germany	20		2	1	1		1		2	6	6	4	8	
Italy							1	2	3	1		1		
Netherlands	1									2			1	
Norway	2		1	1		20		1	8	3				
Russia	1													
Sweden	1	1							1	2				
Switzerland									1					
Spinners (cotton):														
England	15	31	26	13	10	11	1	3	4	6				
Ireland	2	4	6	2		1				1				
Scotland	7	5	2	2	1									
Germany														
Spinners, n. o. d.:														
England	166	82	94	52	40	57	78	140	145	466	738	504	345	189
Ireland	25	11	29	11	6	11	5	84	133	1,321	1,839	1,412	394	42
Scotland	41	12	10	4	7	1	7	21	54	44	84	63	28	12
Wales										5	11	7		2
Austria											1			
Hungary										3	5	1		
Denmark									2	1	16	7		
France	2		2	1					2	2		1	12	2
Germany	9	10	5	18	1	2		3	26	100	57	14	13	6
Greece								1						
Italy			1		1			2	3	2	3	40	26	25
Netherlands		1							6	1	2			
Norway								3	10	98	175	127	48	1
Russia										50	1		2	1
Finland										3	6	4	6	
Poland	1								2	1				
Sweden		1	12	1			8	3	18	315	637	354	111	10
Switzerland		6	1							2	1	8	2	2

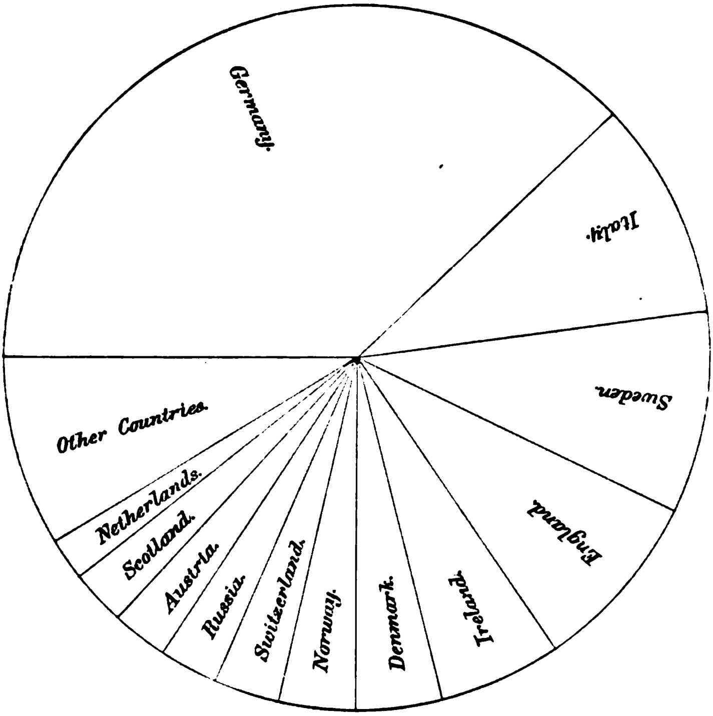
Occupation and nationality.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Steel manufacturers:														
England	1	1	4	2			2	4	1	5		8	5	4
Ireland									1	2	1		1	1
Scotland									3	2		1	1	8
Wales				1										4
Denmark								1						
France	1													
Germany		1							2		6	3		1
Russia												1		1
Sweden												1		
Tool grinders and makers:														
England	7	9	10	17	45	23	7	19	8	12	8	15	13	7
Ireland	3	3	4	4		1	3	1		1	2			1
Scotland	4	3	3	10	48	1	1	4		1		2		5
Wales							1							
Austria				1									1	1
Belgium					2									
Denmark								2						
France		1	2		1								1	
Germany	2													7
Italy		1								3				2
Norway				1										
Portugal					38									
Poland										1				
Sweden					1		1				3			
Switzerland								2	2					
Turners:														
England	21	10	13	14	8	5	3	17	14	11	15	18	10	8
Ireland	19	1	5	3		1		4	3	2	2		2	3
Scotland	5	4	5	1	2	2	4	7	6	7	1		1	5
Wales										6				
Austria		8	5	1	1	3	1	12	7		11	2	3	4
Hungary	1	2						1	2	4	2			2
Bohemia											11	1		2
Belgium			1	1								1	1	
Denmark	1	3					1			1	4	6	3	3
France	2	1	1	2	3	1		2	3	5	1	5	3	2
Germany	100	38	38	14	22	8	9	18	102	98	173	113	33	36
Italy						1	1		2	3	1	5	1	
Netherlands	1	7		1				1	2	1				
Norway				15				1					1	1
Russia	1	1				1		1	1	10	4	3	4	6
Poland	1						1	2			1			
Sweden				8		1	1	2	5	4	3	1		1
Switzerland			1	2	2	3	2	3	14	13	4	1	1	
Watch and clock makers:														
England	38	20	18	24	20	13	18	21	39	51	30	34	27	29

Ireland	4		8	8	2	2	3	6	4	4	8	5	1	6
Scotland	13	5		5	7		2	10	6	7	5	3	6	4
Austria	1	3	3	4	6	6	3	13	8	6	10	15	10	9
Hungary	1	2	1				1	9	4	2	1	1		8
Bohemia										4	1	2		2
Belgium		1	4		3				3	1	2	2	2	
Denmark	3	4	2	2	3	2	2	5	3	11	14	13	8	18
France	9	11	15	14	16	3	15	25	24	8	12	14	16	16
Germany	126	88	65	59	51	48	53	79	159	231	221	162	116	108
Italy	6	3		8	1	1	1	1	1	13	5	5	2	6
Netherlands	2	1	2	1			4	3	1	2		2	5	2
Norway	5	2	2	1			5	4	2	5	7	11	8	10
Portugal							1							
Russia	2		2	3	2	1	8	4	4	20	13	14	27	28
Poland	2	2		2	1				2	3	3	6	2	7
Spain		1							1					
Sweden	6	2	4	5	1	4	3	6	10	24	18	5	6	8
Switzerland	12	4	21	18	41	30	24	76	70	44	53	68	70	54
Weavers, silk:														
England	3	2	2	4		1	9	23	3	2	4		8	9
Ireland	1								3		1			
Scotland		1			1			2	2				2	
Austria														
France			2	2	2				2	21			1	
Germany	2		1		1				2		1	3	5	1
Italy				1							3	2	1	
Poland									3					
Sweden									1					
Switzerland							1		1				6	
Weavers, n. o. d.:														
England	417	243	218	152	93	105	226	663	483	397	419	553	397	472
Ireland	121	60	66	41	27	17	28	82	78	300	95	113	122	82
Scotland	168	91	53	38	23	21	39	163	163	108	58	50	77	137
Wales	1	1	1	1				2	3	2	2		4	
Austria	26	75	60	37	23	27	32	60	79	45	74	19	11	6
Hungary	1	3	4				1		2		7	10	2	
Bohemia										20	24	20	28	18
Belgium	1			4		1	1	1	4		2	4	2	2
Denmark	12	4	27	1	5	3	3	4	10	8	17	22	6	4
France	41	7	16	5	13	7	5	15	43	42	57	24	24	16
Germany	460	314	171	122	110	86	130	377	690	631	725	449	241	156
Italy	8	4	3	4	3	1	2	15	15	15	26	13	22	36
Netherlands	2	2				6			1		6	3	1	2
Norway	1	24	16	2	1	3	1	3	2	4	3		1	4
Portugal					10									
Russia and Poland	2	2	6		3		1	3	6	4	1	12	9	13
Spain				1		1								
Sweden	4	2	7	4	3	1	11	23	20	9	84	7	5	4
Switzerland	4	2	6	4	6	3	21	61	57	28	64	28	21	14
Wire-workers:														
England	4	9	3	1	2		39	7	6	27	6	8	15	9
Ireland	3		2			2	1			1	1			1

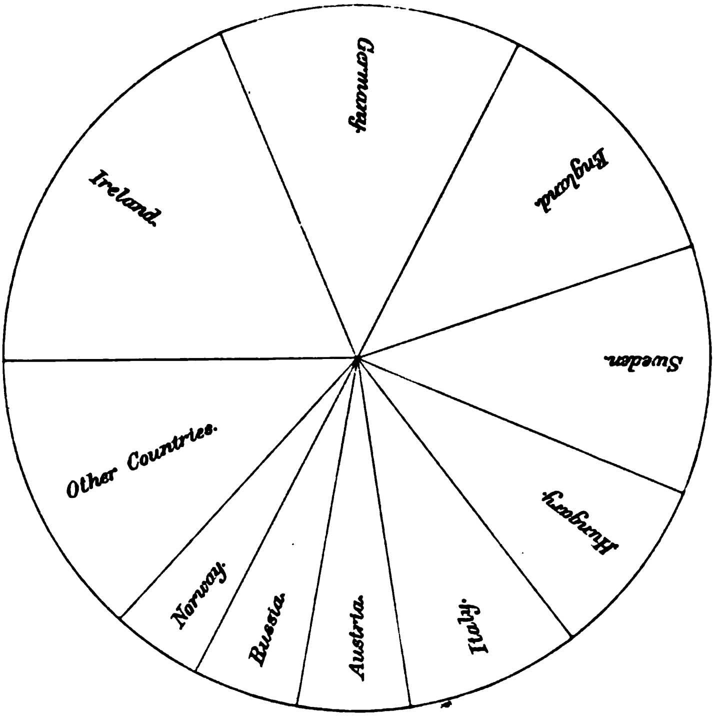
Occupation and nationality.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Wire workers—Continued.														
Scotland	......	......	1	2	......	......	2	2	......	......	1	1	......	2
Wales	......	1	......	......	......	1	1	......	......	......	......	......	......	......
Austria	......	1	......	......	......	......	......	......	......	......	......	......	......	......
Hungary	......	......	......	6	......	4	......	......	......	......	2	4	......	......
Belgium	......	......	......	......	......	......	......	......	......	......	1	......	......	......
France	......	......	......	......	......	......	7	......	......	......	......	......	......	......
Germany	......	1	......	......	......	......	1	1	......	1	1	......	......	......
Russia	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Sweden	1	......	......	......	......	......	......	......	......	......	1	1	......	......
Switzerland	......	......	......	......	......	......	......	1	......	......	......	......	......	......
Wool-manufacturers:														
England	9	8	15	9	7	3	8	10	20	7	16	4	3	16
Ireland	2	5	1	......	......	......	......	2	6	......	1	1	......	......
Scotland	8	6	4	3	4	2	2	5	3	5	2	4	2	5
Wales	......	......	......	......	......	......	......	......	......	......	......	1	......	......
Austria	1	4	......	2	1	......	4	......	3	2	1	......	2	......
Hungary	......	......	......	......	......	......	......	......	......	......	1	......	1	......
Bohemia	......	......	......	......	......	......	......	......	......	......	1	......	......	......
France	......	......	......	......	5	......	......	......	1	......	1	......	......	......
Germany	8	31	7	4	3	3	13	15	31	31	32	10	13	1
Italy	......	......	......	......	......	......	......	4	1	......	......	......	......	......
Netherlands	......	......	......	......	......	......	......	......	......	2	......	......	......	......
Norway	......	......	......	......	......	......	1	......	......	......	......	......	......	......
Russia	......	......	......	......	......	......	......	......	1	2	......	......	4	......
Poland	1	......	......	2	......	......	......	......	......	......	......	......	1	......
Sweden	......	......	......	......	......	......	......	1	......	......	......	......	......	......
Switzerland	......	......	......	1	......	......	......	......	1	......	......	......	......	......
Wool-sorters:														
England	17	11	8	5	8	10	6	16	35	26	19	9	7	4
Ireland	2	1	2	......	1	......	......	1	3	......	3	1	1	......
Scotland	2	2	1	2	......	......	......	......	2	8	2	......	......	1
Switzerland	......	......	......	......	......	......	......	......	1	......	......	......	......	......

Occupation and nationality.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Wire workers—Continued.														
Scotland			1	2			2	2			1	1		2
Wales		1				1	1							
Austria		1												
Hungary				6		4					2	4		
Belgium											1			
France							7							
Germany		1					1	1		1	1			
Russia														
Sweden	1										1	1		
Switzerland								1						
Wool-manufacturers:														
England	9	8	15	9	7	3	8	10	20	7	16	4	3	16
Ireland	2	5	1					2	6		1	1		
Scotland	8	6	4	3	4	2	2	5	3	5	2	4	2	5
Wales												1		
Austria	1	4		2	1		4		3	2	1		2	
Hungary											1		1	
Bohemia											1			
France					5				1		1			
Germany	8	31	7	4	3	3	13	15	31	31	32	10	13	1
Italy								4	1					
Netherlands										2				
Norway							1							
Russia									1	2			4	
Poland	1			2									1	
Sweden								1						
Switzerland				1					1					
Wool-sorters:														
England	17	11	8	5	8	10	6	16	35	26	19	9	7	4
Ireland	2	1	2		1			1	3		3	1	1	
Scotland	2	2	1	2					2	3	2			1
Switzerland									1					

FARMERS, 1886

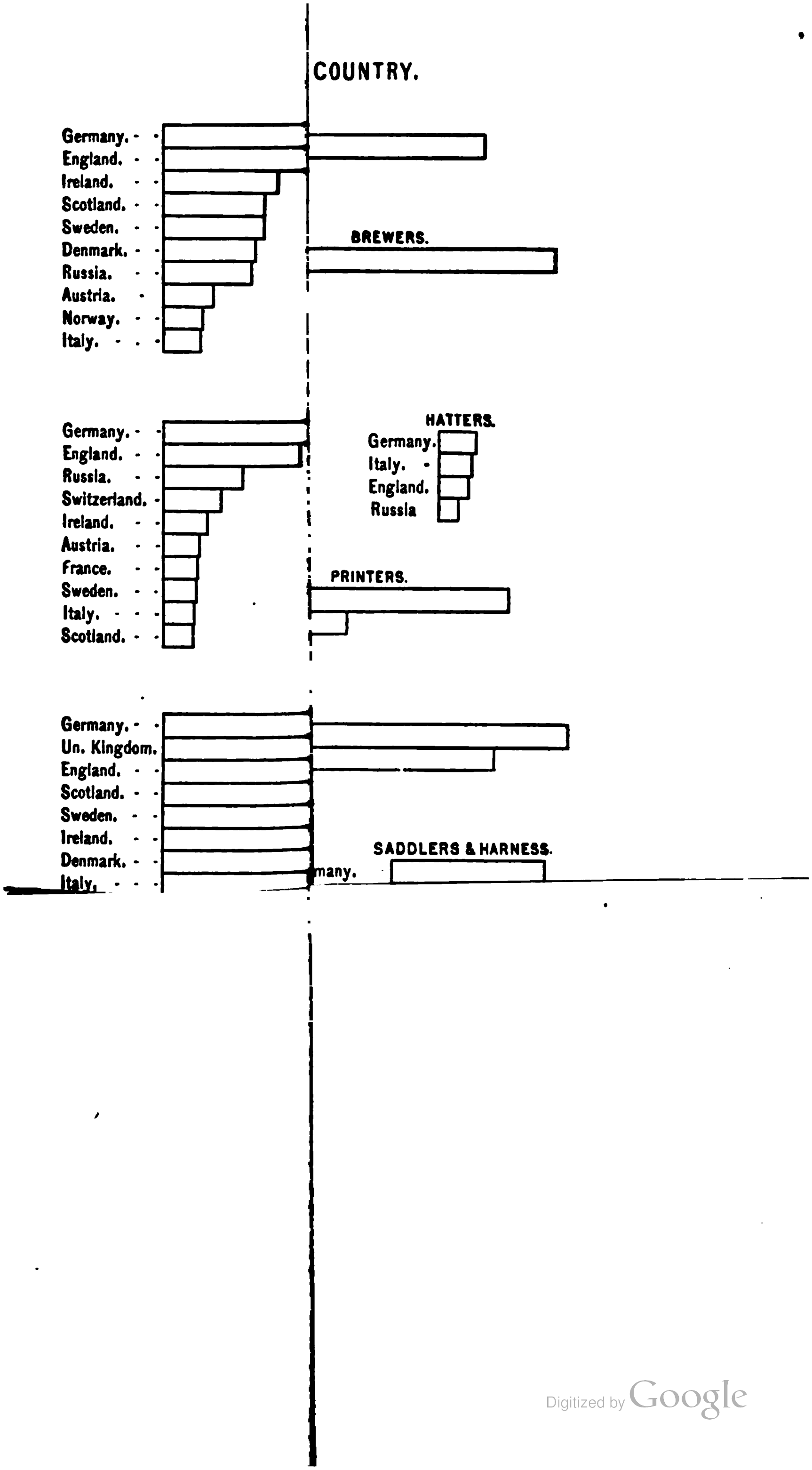


LABORERS, 1886.



	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
FARMERS.														
England	2,871	2,265	1,524	1,390	1,195	975	1,119	2,644	2,440	2,873	1,905	1,869	1,401	1,771
Ireland	2,565	1,409	983	514	524	586	631	2,397	1,651	1,603	1,929	1,527	1,456	1,068
Scotland	504	746	423	216	221	283	305	606	639	643	425	856	344	486
Wales	14	15	15	20	11	15	17	34	29	54	36	26	41	60
Great Britain	....	....	....	....	....	....	....	....	....	....	....	12	....	1
Austria	408	606	410	349	417	870	433	806	1,043	1,184	600	641	510	494
Bohemia	....	....	....	....	....	....	....	....	....	352	370	408	320	227
Hungary	62	60	54	34	13	23	27	203	160	287	153	298	183	222
Belgium	72	57	20	20	19	30	60	166	251	172	106	101	113	113
Denmark	937	303	274	213	288	463	715	1,099	1,041	1,405	1,280	1,451	810	841
France	464	327	305	321	374	192	279	274	613	713	438	380	372	287
Germany	17,958	10,042	5,050	3,493	3,106	3,255	4,105	9,432	10,529	23,593	16,061	18,735	11,125	7,679
Greece	2	....	....	....	....	....	....	....	....	31	....	3	....	....
Italy	343	489	234	249	244	452	505	1,532	1,812	3,849	3,124	2,140	1,136	2,019
Sicily	....	....	....	....	....	....	....	....	....	....	1	....	9	....
Corsica	....	5	5	6	....	52	....	1	....	1	....	....	....	....
Malta	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Netherlands	236	106	142	83	24	51	87	624	1,370	911	570	572	301	403
Norway	3,886	2,229	599	1,108	715	732	757	2,261	1,989	2,416	1,288	1,288	721	819
Portugal	....	....	1	....	....	144	6	....	7	1	111	129	71	37
Roumania	....	....	....	....	....	....	....	....	5	2	2	8	3	18
Russia	93	403	983	566	1,046	437	713	341	240	527	160	360	797	572
Finland	6	....	....	1	3	1	2	26	15	16	41	30	25	26
Poland	92	70	22	47	14	49	23	89	235	187	68	87	52	99
Spain	9	7	8	18	13	12	4	....	3	4	28	35	32	11
Sweden	865	240	372	542	508	564	1,202	4,751	4,585	4,193	2,051	1,519	1,042	1,932
Switzerland	430	434	312	253	248	278	593	1,160	2,027	2,204	2,060	1,464	1,004	661
Turkey in Europe	6	6	3	3	1	1	7	3	4	1	....	1	3	2
LABORERS.														
England	16,003	9,793	6,926	2,825	2,667	2,463	4,151	12,763	13,980	20,822	12,120	11,336	10,012	11,162
Ireland	25,564	10,605	9,000	4,305	3,184	3,987	5,572	25,296	26,070	27,816	26,835	19,704	16,411	16,544
Scotland	1,001	778	565	301	189	243	321	1,331	2,017	2,197	1,710	1,111	1,383	1,547
Wales	100	136	48	14	38	21	106	171	124	327	362	117	153	129
Great Britain	....	....	....	....	....	....	1	2	....	....	....	....	1	1
Austria	770	986	769	676	636	630	741	1,909	3,318	2,741	2,964	4,581	3,839	4,424
Bohemia	....	....	....	....	....	....	....	....	....	920	955	1,576	1,220	883
Hungary	142	142	84	96	55	61	50	1,376	2,673	4,650	6,874	8,769	4,362	7,871
Belgium	276	136	61	37	68	17	69	137	231	113	128	216	218	186
Denmark	1,000	534	409	218	276	307	743	1,690	2,261	2,863	1,992	1,303	1,003	1,409
France	4,034	1,841	1,117	452	408	444	326	442	581	426	541	837	452	470
Germany	21,442	11,121	4,881	2,816	2,550	3,226	4,554	12,202	36,050	36,104	25,586	25,761	18,486	12,453
Greece	3	7	1	....	10	2	5	12	2	60	24	7	60	66
Italy	4,685	4,041	1,354	880	884	1,374	2,172	3,911	5,809	15,631	19,236	5,689	4,527	7,268
Sicily	....	....	....	....	....	....	....	....	4	4	1	25	12	2

	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
LABORERS—continued.														
Corsica	2	20	....	1	1	1	....	1	....	....	....	....	....	....
Malta	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Netherlands	861	404	140	92	90	63	62	215	972	1,229	722	444	291	229
Norway	929	615	753	534	446	774	2,210	5,278	6,177	8,725	4,879	3,434	3,126	4,081
Portugal	4	4	2	4	....	65	131	47	42	7	....	208	155	68
Roumania	....	....	....	....	....	....	....	....	2	7	15	27	109	93
Russia	218	183	638	316	329	198	237	880	1,107	5,079	2,147	3,834	3,561	4,342
Finland	47	68	4	2	6	....	....	102	71	310	387	279	248	271
Poland	1,137	487	200	163	122	154	112	791	1,715	2,103	916	2,007	1,236	1,706
Spain	97	54	45	34	44	14	29	19	64	62	25	28	77	83
Sweden	3,999	1,775	1,322	1,167	1,022	1,359	3,497	13,622	16,040	25,566	12,701	8,279	6,844	10,686
Switzerland	463	463	222	95	200	214	337	481	621	442	1,021	769	661	569
Turkey in Europe	7	12	6	....	9	2	5	2	9	12	6	42	22	23



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The diagrams include merely the immigration during the fiscal year ending June 30, 1886. They show the remarkable predominance of the United Kingdom and Germany in supplying the United States with skilled labor, and also the fact that the Germans represent those industries that depend upon hand labor or the requirements of every-day life, while the English supply the mechanical element. While Germany sends blacksmiths, butchers, carpenters, coopers, saddlers, shoemakers, and tailors, the United Kingdom supplies miners, engineers, iron and steel workers, mechanics and artisans, weavers and spinners. This distinction is clearly marked, and is certainly important.

Since 1879 a new factor has been introduced that may affect the emigration of skilled labor from the Continent of Europe to the United States, and nowhere is the influence to be stronger than in Germany. I refer to the active interference of the state with a view (1) to render the demand for labor more active by giving it a wider range of employment, by raising its standard of living by means of a more careful regard for its comfort, of a provision for sickness, accident, or old age; or (2) by controlling or directing the stream of emigration that it may inure to the benefit of the mother country and not of other and foreign countries.

In Germany, in 1878, a system of inspection of mines, factories, &c., in the interest of the laborer was introduced, the duty of the inspectors, who are Government officials, being to see that shops, mills, factories, and mines be properly ventilated, that the machinery be placed so as not to needlessly endanger the safety of the employé, to guard against the employment of children in dangerous or overtaxing labor, and to protect generally the worker against oppression. This system of inspection is as yet crude and imperfect, the force of inspectors being out of proportion to the work to be performed. Nor was this all. The principal employers in each community are compelled to maintain a bank or fund in connection with their workingmen for the relief of the employed in case of sickness or disability, the employer contributing one-third of such fund and the employed the remaining two-thirds, each worker contributing in proportion to his or her wages. Finally, on the 1st of October, 1886, the accidents insurance act, próviding for the organization of workingmen into societies for relief in case of accident, became of force. "It is a social-political act of great importance to manufacturers and workingmen," says Commercial Agent Smith, "and will doubtless be far-reaching in its effects."

The thrift of the German laborer is proverbial, and the efforts of Government and of individuals have been of late chiefly directed to fostering this feature of his character. Banks, public and private, labor legislation, such as factory inspection, insurance of workingmen, and the like, have been the main instruments of raising the workingman as far as is possible outside of direct gifts or charitable offerings out of a state of dependence upon his daily labor for his daily bread. This has reacted upon his condition, and has given him that slight encouragement to remain at home, the lack of which formerly directed his attention to new fields of labor—as in America. The margin between want and sufficiency has been widened by ever so little, but no one is in a better position to take advantage of that little than is the German.

The consciousness that the Government is taking active interest in protecting the persons and rights of the laborer may without doubt be counted an important factor in leading the German to remain at home, and to hinder his seeking in other lands that greater prosperity which he could undoubtedly find. The recent report of the German factory inspectors gives a picture of the life of a factory operative that is far from favorable. The inspectors would have no interest in exaggerating the unfavorable aspects of a laborer's situation, and would be more apt to err on the other side. Yet the detailed statements printed in the appendix give ample evidence of the urgent necessity for emigration as well as of the inability of the workingman to migrate without state or private assistance.

Of the German population about 35.5 per cent. is engaged in manufacturing industries, counting also the families of the earning persons. The effects of the rise of manufactures in Germany have been exerted chiefly on only about one-third of the total population. There remain more than 19,000,000, or 42.5 per cent., of the total population engaged in agriculture not immediately subject to these influences. The import duties upon grain have not resulted in higher prices to the farmer, and his situation is little better than it was in 1879, though a succession of fair harvests have in a measure repaired the losses incurred in the succession of bad years that followed 1873. The German farmer still constitutes the larger part of the emigration from Germany, and supplies the largest contingent of that class in the immigrants into this country.

The position of Germany is peculiar, in that it has a rapidly increasing population, that is continually crowding upon the limited areas, as yet unoccupied or uncultivated, and upon the opportunities for profitable employment. There is no outlet, such as the vast plains of Russia offer, to the increasing population of that country for colonizing from within—if I may use the term—a process that has prevailed in the United States. Prussia was long the "colony" of the other parts of Germany, the tide of migration flowing from the rural districts into towns, from towns into cities, and from the cities to the capital, wherever the highest returns were offered to labor. The advantages to be gained by a change of this sort are much reduced, the movement itself tending to equalize conditions. Yet the German population must increase and does increase.

Emigration from Germany has a close connection with the rapid increase of population in that country.

The following table shows the proportion in which the different German states increased in population since the census in 1875 and the percentage of inhabitants per one square kilometer (equal 2½ acres):

Table showing the area, population, and its increase since 1875 of the German Empire.

States.	Area (exclusive of parts of seas), square kilometers.	Population.			Percentage of inhabitants per one square kilometer.	Percentage of total population in all places with 2,000 and more inhabitants.	Percentage of total population in all places with less than 2,000 inhabitants.	Average percentage of yearly increase of population, 1875 to 1880.
		Total.	2,000 and more inhabitants (not cities).	Less than 2,000 inhabitants (cities).				
Prussia	348, 257. 6	27, 279, 111	11, 614, 385	51, 664, 726	78. 8	42. 6	57. 4	1. 16
Bavaria	75, 863. 5	5, 284, 778	1, 462, 410	8, 822, 368	69. 7	27. 4	72. 3	1. 02
Kingdom of Saxony	14, 992. 9	2, 972, 805	83, 984	1, 288, 821	198. 3	56. 6	43. 4	1. 48
Kingdom of Wurtemberg	19, 503. 7	1, 971, 118	696, 460	1, 274, 658	101. 1	35. 0	64. 7	0. 93
Baden	15, 081. 1	1, 570, 254	596, 044	974, 210	104. 1	38. 0	62. 0	0. 82
Hesse (Grand Duchy)	7, 680. 3	936, 340	378, 154	558, 186	121. 9	40. 4	59. 6	1. 14
Mecklenburg-Schwerin	13, 303. 8	577, 055	228, 571	348, 484	43. 4	39. 6	60. 4	0. 82
Saxe-Weimar	3, 592. 6	309, 577	97, 028	212, 549	86. 2	31. 8	68. 7	1. 10
Mecklenburg-Strelitz	2, 929. 6	100, 269	36, 949	63, 320	34. 2	36. 8	63. 2	0. 94
Oldenburg	6, 420. 2	337, 478	68, 451	269, 027	52. 6	20. 3	79. 7	1. 10
Brunswick	3, 690. 4	349, 367	145, 708	203, 664	94. 7	41. 7	58. 3	1. 29
Saxe-Meiningen	2, 468. 4	207, 075	63, 005	144, 070	83. 9	30. 4	69. 6	1. 25
Saxe-Altenburg	1, 323. 8	155, 036	58, 512	96, 524	117. 1	97. 7	62. 3	1. 22
Saxe-Coburg-Gotha	1, 968. 1	194, 716	74, 871	119, 845	98. 9	38. 5	61. 6	1. 28
Anhalt	2, 347. 4	232, 592	134, 231	98, 361	99. 1	57. 7	42. 3	1. 70
Schwarzburg-Sondershausen	862. 1	71, 107	24, 557	46, 550	82. 5	34. 5	65. 5	1. 05
Schwarzburg-Rudolstadt	940. 4	80, 296	19, 492	60, 804	85. 4	24. 3	75. 7	0. 92
Waldeck	1, 121. 0	56, 522	7, 523	48, 999	50. 4	13. 3	86. 7	0. 64
Reuss, Elder Line	316. 4	50, 782	24, 767	26, 015	160. 5	48. 8	51. 2	1. 55
Reuss, Younger Line	825. 7	101, 330	44, 162	57, 168	122. 7	43. 6	56. 4	1. 84
Schamburg-Lippe	339. 7	35, 374	8, 942	26, 432	104. 1	25. 3	74. 7	1. 31
Lippe	1, 222. 0	120, 246	23, 309	96, 937	98. 4	19. 4	80. 6	1. 34
Lubeck	297. 7	63, 571	51, 055	12, 516	213. 5	80. 3	19. 7	2. 21
Bremen	255. 6	156, 723	139, 980	16, 743	613. 3	89. 8	10. 2	1. 94
Hamburg	409. 8	453, 809	128, 415	25, 454	1, 107. 5	94. 4	5. 8	3. 09
Alsace-Lorraine	14, 508. 1	1, 566, 670	609, 570	957, 100	108. 0	38. 2	61. 1	0. 45
German Empire	540, 521. 8	45, 234, 061	18, 720, 530	26, 513, 531	83. 7	41. 4	58. 6	0. 43

The relative importance of this rate of increase may be seen when compared with the condition of France, where the population is increasing at so slow a pace as to awaken the most serious apprehensions on the part of her people. The London Economist said in August, 1886:

> The movement of births and deaths in France has never attracted more attention than since the late war, but although politicians and statesmen have pointed out the national danger of stagnation in the population compared with the rapid increase in England and Germany, the warning has so far produced no effects. From that point of view, the returns for 1885 are by no means reassuring. The number of births in that year was 922,361, or the minimum since 1872, with the exception of the year 1880, when the number was 920,177 only. From 1878 to 1884, exclusive of the year 1880, the average had been from 935,000 to 937,000, which was besides a considerable diminution on the previous years. In 1872 the births reached 966,000, notwithstanding the losses in the adult male population from the war; 1873 gave 946,364; 1874, 954,652; 1875, 950,975, and 1876, which was an exceptional year, 996,682. Thus, compared with 1876 the births in 1885 show a falling off of over 74,000. The diminution at the same time coincides with a steady increase in the proportion of illegitimate births, which has risen from 7.15 per cent. in 1879 to 8.03 in 1885. This can only be explained by a reluctance among the male population to assume the burden of a family, and the desire to prevent the dessemination of fortunes by a compulsory division among legitimate children. The effects of the decrease in the births are in some measure palliated by the longer duration of life, which may be also a consequence of the decrease of pauperism from the prudential habits of the nation in the matter of large families. The number of deaths in 1885 was 836,897, and only five times since 1872 has a smaller number been registered, but the excess of births over deaths was, nevertheless, only 85,464. From 1872 to 1877 the average was 143,149; in 1878 and 1879 it fell to 97,000, and twice since it has been lower than in 1885. Compared with 1884 there is a small improvement of about 3,000, but there is still a diminution of 11,000 on 1882 and 1883. The number of marriages fell from 289,555 in 1884 to 283,170 in 1885.*

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* The increase of German population averages about 1.50 per cent. per annum, so that should this state of things continue, within a period of forty-seven years the popu-

The pressure of population by increasing the struggle for existence is a powerful influence in encouraging emigration, but it does not, of necessity, follow that the largest emigration comes from the most populous district. The returns for the first nine months of 1885 may be cited as an indication of the relative importance of each district or province as regards emigration.

Transatlantic emigration from the German Empire via German ports and Antwerp from January 1, 1885, *to September* 30, 1885, *inclusive; also, comparison with the same period of previous years.*

From what state.	Transatlantic emigrants. September, 1885.	Transatlantic emigrants. January 1 to September 30, 1885.
Prussia:		
Province East Prussia	103	1,266
Province West Prussia	413	8,129
Province Brandenburg and Berlin	554	5,310
Province Pomerania	454	9,742
Province Posen	480	8,698
Province Silesia	222	2,333
Province Saxony	176	1,743
Province Silesia-Holstein	375	5,466
Province Hanover	941	7,964
Province Westphalia	288	2,237
Province Hesse-Nassau	421	3,124
Province Rhineland	315	3,216
Hohenzollern	10	80
Prussia, not specially stated	....	43
Total for Prussia	4,752	59,351
Bavaria:		
Bavaria, right bank of Rhine	806	6,824
Government Province Palatinate	162	1,744
Total for Bavaria	968	8,568
Saxony	319	2,510
Wurtemberg	505	4,508
Baden	333	2,996
Hesse	353	2,175
Mecklenburg-Schwerin	159	2,165
Saxe-Weimar	45	348
Mecklenburg-Strelitz	12	193
Oldenburg	161	1,230
Brunswick	34	236
Saxe-Meiningen	32	264
Saxe-Altenburg	4	71
Saxe-Coburg-Gotha	33	243
Anhalt	20	100
Schwarzburg-Sondershausen	22	74
Schwarzburg-Rudolstadt	15	124
Waldeck	12	181
Reuss (old line)	2	40
Reuss (young line)	8	87
Schaumburg-Lippe	19	65
Lippe	46	299
Lubeck	5	121
Bremen	139	817
Hamburg	224	1,688
Alsace-Lorraine	24	637
Germany, not specially stated	1	89
Total German Empire	8,247	88,180

Nor must the question of wages be omitted. The *Leipziger Zeitung* in November summarizes the report of the factory inspectors on the

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lation of Germany would be doubled; while France, for instance, with an increase of her population at the rate of 0.36 per cent. per year, would not reach double the number of her present population for two hundred years.

The yearly increase of population is given for 1884 to be—

[From report by Consul-General Raine.]

Countries.	Increase.	Period of doubling.
	Per cent.	*Years.*
Germany	1.50	47
Great Britain	1.40	51
Netherlands	1.35	52
Denmark	1.28	54
Austria	1.15	0½
Belgium	1.13	61
France	0.36	200

question of wages, showing that the movement of population coincided in a general way with the rates of wages:

> What a motley picture! What differences even in this, the lowest class of wages! How manifold the conditions of life and labor, not only in the relations of the different states to each other, but even within the narrow borders of a minor state. Not only do East and Northwest Germany differ from each other up to 150 per cent. (compare, for instance, Oppeln and Stade), but the average wages of even the little Thuringian capital exceed those of the neighboring mountain village by 100 per cent., and one town often exceeds the next by so much. Froessen and Goerkwitz, for instance, two villages in the principality of Reuss (Younger Line) differ by precisely 160 per cent. in the day wages for female laborers. To construct a "normal rate of wages," which should satisfy "them of Froessen" as well as "them of Goerkwitz," is probably beyond the skill of any social democratic conjurer.
>
> But enough of these, gentlemen. It is impossible within the limits of a newspaper article to exhaust all the deductions and teachings which arise out of the table. But one observation may be permitted.
>
> It is easy to pursue the line of increase which average German wages follow from province to province. It begins with the lowest wages in the extreme east (East and West Prussia, Silesia, Posen), touches the district of medium wages in Middle and a part of South Germany, and then reaches the highest rates of wages in the empire by two branches, one which travels to the southwest (Reichsland, Wiesbaden, &c.), and the other to the northwest (the Hanse towns, with their adjoining territory as far as Hanover and Schleswig). It is therefore precisely the same line as the German immigration follows, "the migration to the west."
>
> Even the law which governs local divergencies within the limits of each province, provincial district, and minor state is clearly defined by the figures of the compilation, which we are unfortunately unable to give in detail. Here it is not the "migration to the west," but the "migration to the town," where the higher rates of wages, especially in the large towns, are the attraction.
>
> One would imagine that the continuous flow "towards the west" and "towards the town" would gradually equalize the differences in wages. But there is no trace in our table of any such equalizing influence of the freedom of movement.

The action of the state may also be exerted in directing the stream of emigration into certain channels where the supposed advantages will be greater to the directing state. The colonizing policy of Germany had for its object the founding of colonies, where room may be found for the surplus population, where the inhabitants will still be subject to the mother country and where new markets will be found for German manufactures. On this point Consul-General Raine wrote in 1885:

> The necessity for extending the dominion of Germany, in view of such steady excess of births over deaths, forced itself upon the statesmen of the Empire, and even if we place the number of emigrants on the average at 80,000, according to German statistics, or more (about 100,000 according to ours) per annum; such emigration does not balance by far the increase of births, 540,000 per annum; hardly 16 per cent. of the increase are absorbed by emigration. It is but necessary to add that under such circumstances the colonial policy, so unexpectedly inaugurated, met with universal approval throughout Germany. A Berlin paper says:
>
> "We Germans have long been colonizers on a large scale; but, unlike the English, French, Dutch, and Portuguese, we have always colonized lands belonging to other Governments, and not our own."
>
> Considering the annual growth of the nation, the question was then asked:
>
> "Could not the Government acquire for them territories where they would continue to be under German jurisdiction and enjoy the fatherland's protection?"

The foundation of colonies and the encouragement offered to emigrants are too recent measures to be as yet judged. The flow of emigration shows little change, as the following table will prove:

German emigration in ten years, 1875–1884.

Years.	Total.	Emigrated to— United States.	British North America.	Brazil.	Central America, and Mexico, South America.	Australia.	Africa.	Asia.	Number of emigrants per 10,000 inhabitants of the German Empire.
1875	30,773	27,834	38	1,387	450	1,026	1	37	73
1876	28,368	22,767	11	3,432	847	1,226	54	31	66
1877	21,964	18,240	11	1,069	557	1,306	750	31	50
1878	24,217	20,373	89	1,048	545	1,718	394	50	55
1879	33,327	30,808	44	1,630	517	274	23	31	75
1880	106,190	103,115	222	2,119	539	132	27	36	235
1881	210,547	206,189	286	2,102	876	745	214	35	464
1882	193,869	189,373	383	1,286	1,205	1,247	335	40	426
1883	166,119	159,894	591	1,583	1,125	2,104	772	50	362
1884	143,586	139,339	728	1,253	1,335	606	230	35	311

Without attempting to enter into a discussion as to what the real effects of Germany's protective policy has been, there is no doubt that the opportunities for the employment of labor has been greatly increased since 1879. For example, in 1879 170,509 men were employed in mining black coal; in 1883 the number had increased to 207,577, though 503 works were in operation in 1879 as compared with 489 in 1883. So again 721 brown coal mines in 1879 engaged 24,150 miners; in 1883, 665 mines employed 26,824 men; in 1879, 19 copper mines contained 9,118 miners, and in 1883, 36 mines contained 14,326 miners. In 1879, 2,487 mineral works in operation gave employment to 275,711 miners, and in 1883, 2,567 works contained 334,137 miners, the increase in the number of works being about 3 per cent. and in the men employed more than 21 per cent. So again in the furnaces and foundries the number of works increased from 227 to 270, or about 19 per cent., and the hands employed from 32,242 to 42,724, or about 33 per cent. The returns for other great industries, such as the textile and sugar industries, are not at hand, and while the metal industries, and more especially the iron and steel industries,* have been greatly, almost abnormally stimulated,

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* **From Consul Wamer's Report.**—The subjoined table shows the production, import, export, and consumption of pig-iron, in the German customs territory, from the year 1865 to the year 1885, inclusive:

Years.	Production.	Imports.	Exports.	Consumption.	Years.	Production.	Imports.	Exports.	Consumption.
	Tons.	*Tons.*	*Tons.*	*Tons.*		*Tons.*	*Tons.*	*Tons.*	*Tons.*
1865...	933,437	179,337	10,418	1,102,356	1876..	1,801,457	583,858	306,825	2,078,490
1866...	996,738	140,469	20,606	1,116,601	1877..	1,884,107	541,884	365,625	2,060,346
1867...	987,163	116,914	29,621	1,074,456	1878.	2,108,034	464,679	418,916	2,173,797
1868...	1,200,188	132,592	98,179	1,234,601	1879..	2,190,003	388,657	433,674	2,144,986
1869...	1,356,965	189,837	102,362	1,444,440	1880..	2,675,717	237,916	287,529	2,626,104
1870...	1,345,520	229,422	110,563	1,464,379	1881..	2,862,673	250,246	312,570	2,800,349
1871...	1,491,478	146,134	111,838	1,820,274	1882..	3,326,776	291,058	246,487	3,371,347
1872...	1,927,062	662,981	150,857	2,439,186	1883..	3,417,209	283,545	319,448	3,381,306
1873...	2,176,458	744,121	154,368	2,763,811	1884..	3,550,034	272,210	273,716	3,548,528
1874...	1,856,311	550,467	222,501	2,184,277	1885..	3,652,634	....	....	....
1875...	1,981,735	625,645	339,192	2,268,188					

there can be little doubt that other industries would show a like movement, though on a more moderate scale.

It does not follow, however, that the absolute welfare of the laborer has been improved through an artificial creation of a greater demand for his skill. The continued fall of prices consequent upon an enormously increased production is a general feature of the present period, and Germany offers no exception to the rule. The prices of iron per ton since 1879 have been as follows:

Markets.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
Berlin:	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.**
Best Scotch foundry	74.4	83.7	81.7	83.8	82.5	75.1	69.8
English No. 3	55.6	71.1	64.9	67.3	62.9	58.5	53.4
Breslau:							
Puddle	51.7	66.3	55.9	66.1	57.8	54.5	48.3
Foundry	56.8	72.9	62.3	69.5	63.6	60.3	56.5
Dortmund:							
Bessemer pig	64.2	78.7	69.3	70.1	60.6	53.1	45.8
Westfalisch puddle	53.2	68.7	57.4	65.0	57.6	50.4	44.2
Dusseldorf:							
Best German puddle	56.1	83.5	59.0	64.6	57.6	50.0	44.5
Best German foundry	62.6	87.1	73.3	75.0	72.9	65.7	58.4

*Mark equivalent to 23.8 cents.

This movement of prices has resulted in enforced economy, and it may be questioned whether the full effects of the increased demand for labor have not been felt, and not only must there ensue a more moderate extension of industry, but also a reduction of the number of workingmen, either by the shutting down of unprofitable works or by the substitution of machine for hand labor. This means that the increase in the number of laborers is no longer commensurate with the extension of industry; that the period of expansion is ending and a period of contraction will in all probability follow. In support of this position may be cited the *Berliner Tageblatt* of October 22, 1886:

> The report on the condition of industry and the demand for labor, stated in general that, as in the previous year, so also in the year of the report, many opportunities of work were presented at reduced wages. While there are some districts where the statistics are more unfavorable, there are also some which show an improvement, especially for certain branches of industry. Further on it is stated that in all the districts, with slight exceptions, the number of establishments, as well as that of the laborers, has increased, yet the increase of the laborers has been relatively smaller than that of trade. The reason lies in the growing endeavors of industry to displace hand-work by machinery. A result of this development is a constantly increasing crippling of the smaller business in comparison with the larger, especially, *e. g.*, of the hand-looms in the different branches of textile industry. Hand-work has also had to suffer much, because, as for instance, in articles for shoemakers, the wholesale manufactory is taking the place of the more moderate production by hand.
>
> That the unfavorable condition of agriculture reacts directly on industry, particularly machine industry, is especially mentioned in some of the districts.
>
> Indeed, it cannot be denied that the general condition of industry has been correctly sketched in the foregoing sentences, but how do the many opportunities for work, which are said to have been presented, agree with this? If the increase of laborers is not equal to that of business, if in the development of industry the tendency prevails to displace hand-work by machinery, and if the smaller establishments are thereby kept in the back-ground in comparison with the larger ones, it is perfectly clear that the field in which human hands are demanded must become constantly narrower, and in that endless progression there must be a surplus of hand laborers. The above-mentioned many opportunities for work can then hardly be considered representative of the facts.
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> * * * * * * *
>
> It is worthy of mention that in the provinces where industry is the most developed these relations are the most unfavorable.
>
> They write of the district of Dusseldorf thus: "The suspension of establishments of an important nature have not occurred, but the business was considerably less than

in the foregoing year. In many establishments the number of laborers has been diminished, smaller jobs or holidays have been introduced, and here and there the wages have been lowered, so that the entire pay of the laboring classes seems to have been lessened." They say of Aix la Chapelle: "The number of laborers is somewhat lessened, but according to the report the diminution of industrial pursuits has been relatively larger than that of the number of laborers. The result of the diminution of industrial pursuits has been that in many establishments the number of working hours per day has been considerably reduced."

In the district of Leipzig the number of laborers has increased in spite of the unfavorable condition of industry. The report says: "In almost all branches of business there is complaint, to an increased extent, of overproduction, damaging competition, the low prices of the manufactures, and the consequent unsatisfactory profits of industrial enterprises. In connection with the reduction of the prices of raw materials, this caused the shortening of the time of work, the lowering of wages, partly also the discharge of laborers, and the suspension of entire establishments."

It would take too much space to give all that the reports on the unfavorable condition of industry contain. We will only further note that in the report from Thuringia there is complaint of the ruin of the textile industry. In other provinces in which the sugar industry is the most important, especially in the districts of Merseburg-Erfurt, Anhalt, and Brunswick, the continued unfavorable condition of that industry is reported, which naturally reacts on the laborers. Machine manufacturing is also thereby unfavorably influenced. As to the condition of mining, the report contains only what is unfavorable.

In the communications facts are brought in from districts to try to show a rise in industrial development. · It cannot be denied that in some branches a brisk business has been carried on, but it is only in those which do not form the foundation of the business life of Germany, but the less important branches of industry.

One would not go astray in asserting that the rise which is supposed to show itself in the increase of business and establishments in many districts is only apparent. It is correctly stated in the report on the district of Dresden: "In the year of the report the business establishments of the districts have again partly increased, partly become enlarged, but there is no mistake but that these increases must be regarded as the last endeavors to try to reach the profits of former years. There was an almost universal standstill, particularly at the end of the year, if not retrogression of the larger business establishments to be observed, which manifested itself mostly in diminishing the working hours.

The following observations of the factory inspectors of the district of Zwickau are characteristic of our industrial relations: "Since, with every to any extent favorable condition of business, attempts are made to enlarge existing establishments and to equip them with machines capable of a great amount of work, or to establish new factories by making use of the concessions made by machine manufactories, the production of goods must be increased above the usual demand."

So that while the economic policy of the Empire has probably tended to discourage the emigration of skilled labor by creating employment for it at home, such an artificial structure cannot remain intact. The sugar industry is an example of extreme inflation, and the iron industry is not far behind it. In default of foreign markets the home markets must be glutted, mills and works run on short time or shut down, and labor without employment. The strenuous endeavors of German manufacturers to cultivate a foreign trade, and in this they have had all possible favors from the Government, have been attended with a noteworthy success, and especially in Central and South America. But such new markets are gained at great cost and are not without their limits. It follows, therefore, that the task of finding an outlet for an over-stimulated production must be more and more difficult, and the time will come when the skilled labor of Germany, crowded out at home, must seek employment elsewhere, which means in the United States.

It must be admitted that the French returns of emigration offer many puzzling features. The French are not inclined to leave their country, and the economic situation is such that the temptations to emigrate are not so actively present as to other peoples, though the margin between want and sufficiency in France is quite as narrow, if not even more narrow, than in Germany and England. The general distribution of landed property and wealth in general (of which the distribution of the funded debt may be taken as an evidence), even though the share of each is small, satisfies the wishes of the Frenchman and lead him to endure without complaint what would be unendurable to an English or an American laborer. The succession of bad or deficient harvests which succeeded 1873, touching as it did the material interests of nearly the whole population, and the visitations of such a pest as the phylloxera, were not incentives to emigration, as the following figures show:

Emigration from France, 1870–1883.

Year.	Number of emigrants.	Year.	Number of emigrants.
1870	4,845	1877	3,666
1871	7,100	1878	2,316
1872	9,581	1879	3,634
1873	7,161	1880	4,612
1874	7,080	1881	4,456
1875	4,464	1882	4,858
1876	2,867	1883	4,011

The climax of the period of speculation in the United States, offering as it appeared to many exceptional opportunities for improving the material welfare of the immigrant, but probably the more immediate and active force—the war between Germany and France—give the highest result in 1872. Even this 9,581, represents barely ¼ of 1 per cent. of the total population of the country in that year (36,102,921), a proportion so small as to be almost of no account so far as numbers go.

Taking 1883 as the year for examination, it is found that out of a total emigration of 3,940 from the 87 departments into which France is divided, 9 departments supplied 1,854 or about 47 per cent., and these 9 departments were the only divisions which gave 100 or more emigrants. The following are the details:

Alpes (Hautes)	217
Doubs	119
Meurth et Moselle	111
Pyrénées (Basses)	364
Rhin (Haut)	129
Rhône	103
Saône (Haute)	194
Savoie	229
Seine	388

Small as these figures are they represent in some cases a large percentage of the total, and even more than the total, increase of population in the department to which they apply. This is the case of Alpes (Hautes). The births in 1883 numbered 3,473 and the deaths 3,347; the excess being only 126. Yet the emigration was 217 for that year. So also in the Saône department, the births were 5,933 and the deaths 5,852, leaving an excess of only 81, which was more than absorbed by an emigration of 194. In Rhône the deaths exceeded the births by 272, to which must be added an emigration of 103, making a total loss of 375 in one year. The low returns of emigration, therefore, are in reality high when compared with the total population, or rather with its rate of increase. M. Loua estimates that since 1870 the French population, by its own natural growth, that is, by the excess of births over deaths, has only increased to the extent of about 100,000 souls annually, and of this increase about one-twentieth emigrates to other countries.

The report of Consul Mason (Marseilles) shows how little emigration is stimulated by a grievous and exceptional depression, such as was produced by trade and industrial stagnation and a visitation of cholera, for the number of French emigrants leaving Marseilles was less in 1885 than in any year since 1879, with the exception of 1884. The complication of ills raised the exodus from 472 in 1884 to 538 in 1885, an increase of only 14 per cent.

The destination of French colonies is in Algiers or the Argentine Republic in preference to the United States, greater inducements being offered; the Germans, on the other hand, come to the United States.

France and Germany were taken for the basis of these notes because of the active interference of the governments in industrial and commercial affairs.

It is difficult to determine how far these influences have as yet influenced the character of the immigration. In 1873 the number of skilled immigrants in the Treasury returns was 48,792; in 1879, 21,362; and in 1886, 36,522. The percentage supplied by each nation of Europe showed that in the interval marked changes occurred. The proportion of the United Kingdom, France, Germany, and Norway decreased, the change being especially marked in Germany and France, the two nations that have adopted a policy of protection. On the other hand the proportions of Austria-Hungary, Belgium, Denmark, Italy, Russia, Sweden, and Switzerland show a notable increase, while the percentage of the Netherlands remained almost stationary. In detail these proportions are:

Countries.	1873.	1879.	1886.
	Per cent.	*Per cent.*	*Per cent.*
United Kingdom	40.91	35.07	37.58
England	25.08	21.71	22.19
Ireland	8.06	5.66	5.98
Scotland	7.33	7.09	8.72
Austria*	1.37	2.93	5.43
Belgium	.32	.31	.72
Denmark	1.10	1.28	2.04
France	3.30	4.10	1.79
Germany	30.77	21.37	25.45
Italy	1.10	2.04	5.48
Netherlands	.53	.25	.51
Norway	3.38	3.41	2.66
Russia †	.94	1.65	5.60
Sweden	3.48	4.92	4.86
Switzerland	.68	2.77	2.02

*Includes Hungary and Bohemia.

† Includes Poland and Finland.

In spite of the efforts made to direct emigration into certain channels, the United States has attracted and will continue to attract the bulk of migrants. The reappearance of Government as a colonizing agent is noteworthy, as a revival of a portion of the mercantile system that prevailed at the beginning of the last century. The time was when the colonies were an object of protection, not only as regards the administration of justice, but also commercially and industrially. The American Revolution ended that régime, and voluntary emigration, coupled with the widest possible latitude of movement, succeeded a policy of regulation, control, and even repression. The activity of government in matters of colonization has again revived. France is fostering a colonial policy, though as yet with unsatisfactory results. Germany follows in seeking to build up a colonial empire that will redound to the advantage of the mother country. Even Italy, that sends her people to South America in preference to the United States, shows symptoms of also desiring colonies in Africa. In Great Britain the functions of government are still confined to the care and protection of the emigrants, though a recent move—the institution of an office of inquiry, as described in the inclosure to Consul-General Waller's report—may lead to a further attempt to direct the outflow of population to British colonies. The policy of assisting emigration to relieve pauperized or overpopulated districts is openly taught by English statesmen, and has much to commend it, though little more than a temporary expedient. Organized emigration, whether undertaken by individual or public effort, has rarely proved successful.

Not the least satisfactory part of these reports is the absence of instances of a deportation of criminals and incapables. The necessity for a more strict supervision on immigrants is, however, insisted upon by the executive officers who receive immigrants at the principal ports of this country. The insane and criminal may be excluded, but there is a class that has quite as little claim to be received—the chronic pauper. It is true that the pauper, like the blind, the cripple, and the lunatic, is subject to special bonds as liable to become a burden and a future charge to the State, but there is abundant evidence that this restriction is not sufficient, and that our public institutions are largely recruited from the ranks of the immigrants. The State boards of immigration were created to protect alien passengers, and to prevent, as far as is possible, the introduction of paupers and criminals. The execution of this purpose has been very defective through a complication of authority. In the State of New York an act of 1876 provided, in substance, that the captain, consignee, or owner of every vessel arriving at the port of New York from a foreign country, having on board immigrant passengers, should give a bond to the people of the State in the penal sum of $300 for each of such passengers, to indemnify the State against any charge or expense on account of the passenger named in the bond within five years from arrival. This provision was commuted into a payment of so much for each immigrant (ranging from $2.50 to $1.50) to the commissioners of immigration, such payments to constitute a fund for reimbursing communities for charges incurred in supporting or relieving an immigrant within the term of five years mentioned. This system was adopted in 1847, and remained in force until March, 1876, when the law was declared unconstitutional. The decision withdrew the whole subject from State supervision, and placed it under the control of Congress. As no action, however, was taken by Congress, the State, in 1881, undertook to collect a head or inspection tax on every alien passenger, a measure that was also declared unconstitutional. In August, 1882, the existing national law was passed. The experience of Massachusetts has been nearly the same.

The number of immigrants returned by the New York commissioners to the ports whence they came was in 1883 1,350, and for the following reasons: 53 were insane, 6 were blind, 4 deaf and dumb, 16 idiots, 25 cripples, 60 enciente, 649 incapacitated through illness, 75 by reason of old age, and 462 were, through destitution or inability to obtain employment, unable to maintain themselves without becoming a public charge. In 1884 the number was somewhat less—1,144—of whom 875 were from sickness or destitution unable to maintain themselves. In 1884 1,172 immigrants were returned.

In Massachusetts, out of a total immigration of 28,526, 14 were refused permission to land during the year ending October 1, 1886. In the preceding year 21 were denied admission out of a total of 19,929. In spite of these apparently favorable returns it is unquestionable that a large part of the inmates of the public and charitable institutions of the country are of foreign origin, and who might have been excluded as incapable when first coming to these shores.

Respectfully submitted.

WORTHINGTON C. FORD,
Chief of Bureau.

Hon. T. F. BAYARD,
Secretary of State.

[From reports of the New York Commissioners of Emigration.]

Immigrants admitted to Ward's Island, with their nationalities, 1877–1885.

Nationality.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
Germany	1,266	1,457	1,452	1,669	3,126	1,655	1,782	1,432	790
Ireland	804	623	566	703	799	578	670	408	350
Italy	353	235	280	294	365	524	527	111	72
England	221	130	137	151	244	203	247	213	160
Russia	131	10	22	17	764	37	49	142	186
Switzerland	121	93	185	200	217	113	111	77	28
Austria	89	48	48	62	38	57	58	79	101
France	77	58	61	40	70	31	86	27	21
Denmark	49	34	40	51	76	42	46	41	22
Scotland	46	18	55	61	65	32	47	88	28
Sweden	43	85	....	140	187	112	130	51	52
Bohemia	34	....	52	30	47	17	18	39	16
Poland	15	34	13	180	162	49	55	98	36
Hungary	14	29	17	94	132	148	161	104	118
Belgium	8	3	10	7	10	5	5	6	5
Holland	7	10	8	15	57	36	38	17	6
Spain	4	....	....	....	1	....	....	....	2
Norway	6	10	33	40	63	41	50	35	24
Finland	....	....	....	4	....	4	5	6	4
Total from all countries	3,496	2,910	3,148	3,808	6,527	3,818	4,180	3,102	2,109

Insane immigrants admitted to State Emigrant Insane Asylum, 1877–1885.

Nationality.	1877.		1878.		1879.		1880.		1881.		1882.		1883.		1884.		1885.		Total.	Per cent. of total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.		
Germany	12	15	12	6	16	10	31	16	40	27	43	39	32	17	23	20	20	20	399	34.79
Ireland	5	19	7	15	11	21	19	25	23	37	25	59	20	27	14	23	9	13	372	32.40
England	3	2	4	4	3	2	6	5	8	2	8	5	9	6	6	...	7	2	82	7.14
France	1	1	3	...	1	...	1	1	4	3	1	3	3	...	1	1	1	...	25	2.17
Sweden	1	...	...	1	1	1	6	3	5	5	3	4	6	2	1	2	3	2	46	4.00
Scotland	...	1	...	...	...	...	1	...	2	1	1	1	1	...	2	...	2	1	13	1.13
Switzerland	2	1	...	2	5	...	2	...	2	1	2	2	2	2	1	1	2	1	28	2.44
Denmark	1	...	...	...	1	...	2	1	1	...	1	2	...	1	...	3	...	...	13	1.13
Italy	6	...	...	...	...	...	3	4	3	1	12	4	9	2	1	1	1	...	47	4.00
Holland	1	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	4	.....
Belgium	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	.....
Bohemia	...	1	...	...	1	1	...	...	1	1	2	1	...	1	1	...	3	1	14	1.22
Russia	...	1	...	...	3	1	1	...	1	2	1	1	2	...	2	3	5	1	24	2.09
Hungary	...	...	2	...	...	...	2	3	3	4	2	1	1	2	1	1	3	1	26	2.26
Austria	...	...	1	...	...	1	1	1	1	1	1	...	2	...	1	2	...	1	13	1.13
Roumania	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	.....
Poland	...	...	...	...	...	...	2	1	6	2	6	...	1	4	...	2	1	2	27	2.35
Norway	...	...	...	...	...	...	...	...	...	1	1	1	1	...	2	...	...	1	7	.....
Total	32	42	30	29	42	37	78	60	102	88	112	124	89	64	56	59	58	46	1,148	.....

[From a report by Commercial Agent Smith, published in Consular Reports No. 74, page 371.]

WHAT DOES IT COST A WORKINGMAN WITH A FAMILY TO LIVE?

This is a question which has often been asked the consular corps by the Department and variously answered. The inspector for the Leipsic district last year obtained from sixteen heads of workingmen's families, who were designated by their employers as orderly persons, statements of what it annually costs them to live, and only in four instances out of the sixteen cases was the income slightly greater than the expenditures, which had to be made up by the wife or other members of the family, or some necessity done without in the twelve other cases.

Five of the detailed statements made are published in the factory inspector's report, and I herewith give them (with the mark reduced to dollars at 23.8 cents to the mark):*

1.—*Expenses for one year of a family of eight persons.*

Items.	Amount.	Items.	Amount.
Bread	$54 45	Local tax and state income tax	$1 82
Butter	26 52	Wood	1 90
Potatoes	11 13	Coal	12 37
Coffee and chicory	9 28	Bed-straw	1 90
Meat	26 18	Bed-clothing and towels	5 71
Milk and curds	6 20	School books and writing materials	2 14
Beer, tobacco, and brandy	2 79	Chimney sweeper	17
Oil and soap	7 14	Brushes, combs, grease for leather, and blacking	95
Salt	1 07	Mending and renewal of household articles	2 38
Flour	2 38	Shoes	3 57
Wheat bread	10 71	Clothing	3 57
Rice and other vegetables	3 57	Total	222 81
House rent	15 70		
School tax	4 45		
Dues to invalid fund	8 71		
Insurance against fire	97		

The income was $3.68 a week, making an annual income of $191.82, leaving about $30 to be made up by the family in some way.

2.—*Expenses for a year of a carpenter and his wife.*

Items.	Amount.	Items.	Amount.
Corporation tax	$3 83	Coffee	$8 63
State tax	1 98	Barley	1 23
House rent	35 70	Milk	6 18
Tax on personal property	59	Fuel	18 56
Dues to invalid fund	5 32	Soap	6 18
Pocket money	30 94	Coal-oil	2 47
Clothing and shoes	9 90	Oil for burning	2 47
Bread	24 75	Thread, yarn, and needles	1 23
Butter	37 12	Matches	23
Salt	1 23		
Flesh	24 75	Total	235 76
Vegetables	12 37		

In this case the income was $4.83 a week, or $251.23 a year, without missing a couple of day's work

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*In consequence of not carrying the decimals out far enough in the reductions, the total sums will not be in exact agreement with the columns when added up, but are correct.

3.—*Expenses for 14 days of a family consisting of a man and his wife and two children, one one and a half years old and the other four, the man earning $8.56 every two weeks.*

Items.	Amount.	Items.	Amount.
Six loaves of bread (every two weeks) at 18 cents a loaf	$1 11⅓	6 cigars	$0 05 7/10
Every Sunday morning 8⅓ cents, worth of rolls, &c	33⅓	125 grams of smoking tobacco	04 7/10
Every Sunday at dinner ½ kilogram of meat, at 16⅔ cents, and meat four times during the week, each time ¼ of a kilogram, at 7⅝ cents	96	Curd for potatoes	08½
One-half kilogram of suet in the soup	16⅔	1, 250 grams of flour	12
One-half kilogram of fat	19	Dues to factory invalid fund	11½
One-half kilogram of sausage	19	Private fund	06
Potatoes	52	Total 14 days	7 51
8 pieces of butter, at 16 cents a piece	1 33⅓	For year	195 23
For the smallest child, 3 cans Swiss milk	50	Annually for funeral money	71
Clear sugar, 1 kilogram	19	Straw for beds	95
Loaf sugar, ½ kilogram	06½	Rent	11 42
Vegetables, 750 grams rice, 750 grams peeled grain, and 750 grams millet	25½	Taxes, including income tax	2 76
One-half kilogram of coffee	42½	Fuel	14 28
1 package wheat coffee	00 9/10	Shoes	8 33
6 herrings, at 2⅓ cents each	14⅕	Clothing	21 42
Vinegar and sweet oil	04 7/10	Bed-clothing	3 57
Soap for washing clothes, ½ kilogram	10½	4 glasses of beer on Sundays	09½
Grease for washing clothes, ½ kilogram	08½	Hats, &c	1 19
Soda and starch, 750 grams	10 9/10	House utensils	47
Hair-oil	0 02 3/10	Keeping furniture in good condition	47
Spices	0 02 3/10	Thread, needles, ribbon, and buttons	47
Coal-oil	14⅕	Yarn for making stockings	71
Salt, 1 kilogram	04 7/10	Total annual expenditure	261 87
Blacking and grease for shoes	02 3/10	Income	222 76
		Excess	39 11

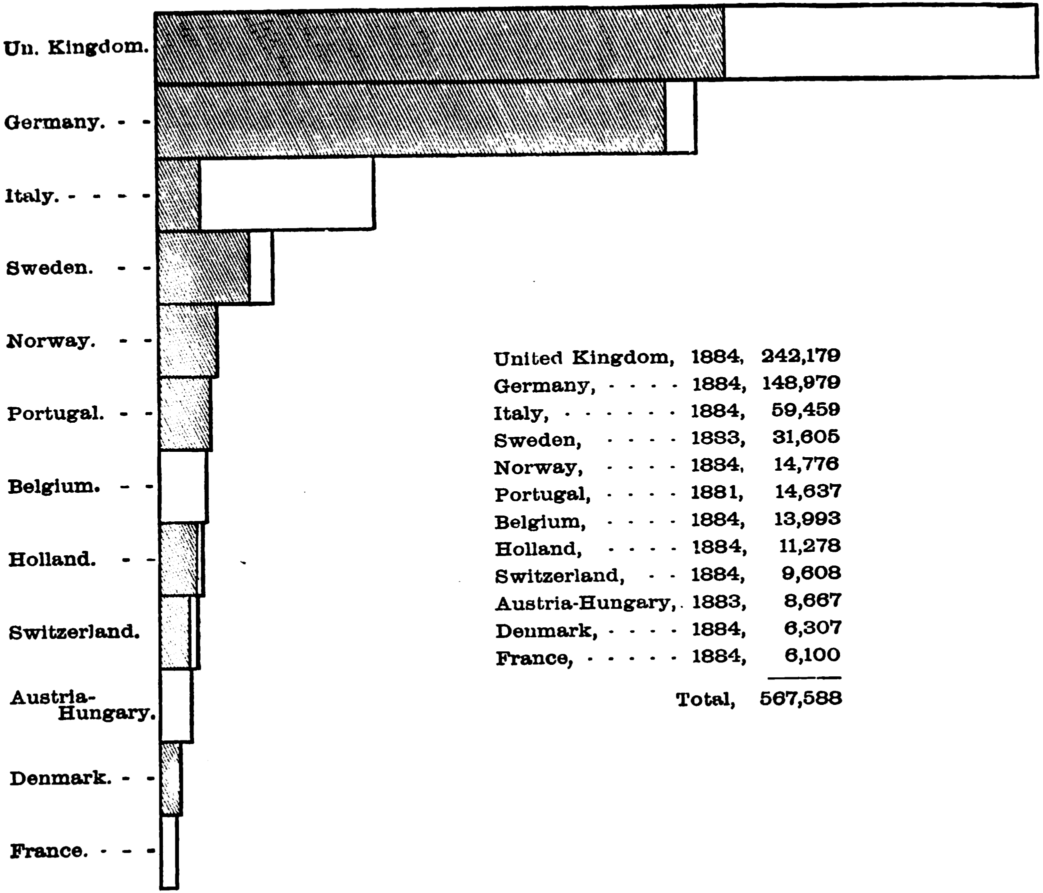
This man was a wool-spinner. His beer account, it will be noticed, is all wrong, and ought really to be $4. 76 for the year.

4.—*Weekly expenses of a locksmith's family, consisting of himself and wife and two girls, one 11 and the other 13 years old.*

Items.	Amount.	Items.	Amount.
Rent	**$0 71**	**Vegetables**	**$0 09½**
Fuel	**28½**	**Butter (3 pieces)**	**50**
Taxes	**13**	**Cheese (4 pieces)**	**06½**
School tax	**12**	**Eggs (3)**	**04 7/10**
Invalid fund	**15**	**Flour**	**06**
Fire insurance	**02**	**Salt**	**01**
Reading matter	**02 3/10**	**Vinegar and oil**	**02⅜**
School books and writing paper	**03½**	**Coffee**	**12**
Clothing	**71**	**Sugar**	**02⅜**
Shoes	**19**	**Milk**	**08½**
Bed-clothes and towels	**07**	**Beer**	**16⅔**
Yarn, thread, and ribbon	**04 7/10**	**Total**	**5 41**
Soap and soda	**09½**	**For year**	**281 30**
Coal-oil	**08½**	**The average income for six years past was**	**285 60**
Blacking and matches	**02 3/10**		
Bread	**47**		
Meat (⅔ of a pound daily)	**71**		
Potatoes (2 pounds a day)	**19**		
Pulse	**12**		

EMIGRATION FROM EUROPEAN COUNTRIES TO ALL PARTS OF THE WORLD.

[Shaded portions represent emigration to the United States.]



United Kingdom,	1884,	242,179
Germany, - - - -	1884,	148,979
Italy, - - - - - -	1884,	59,459
Sweden, - - - -	1883,	31,605
Norway, - - - -	1884,	14,776
Portugal, - - - -	1881,	14,637
Belgium, - - - -	1884,	13,993
Holland, - - - -	1884,	11,278
Switzerland, - -	1884,	9,608
Austria-Hungary, .	1883,	8,667
Denmark, - - - -	1884,	6,307
France, - - - - -	1884,	6,100
	Total,	567,588

5.—*Expenses of a dyeing master for two weeks, having for a family himself and wife, two sons, one learning to be a joiner and the other still going to school, and a daughter.*

Items.	Amount.	Items.	Amount.
7 loaves of bread, 4 kilograms to the loaf, at 18 cents	$1 26½	Annual funeral dues	$0 98½
Small rolls	28½	Taxes	2 57
Flour	28½	Fuel	14 28
8 pieces of butter, at 16½ cents	1 33	Bed-straw	71
7 liters of milk	13½	Shoes for all	11 90
5 eggs	07	Clothing and hats	23 80
Cheese and curds	13½	Keeping furniture and utensils in order	71
Fat, suet, and lard	35 1/10	School expenses	10 71
Sausage	14½	Postage	14
Potatoes, ½ of a centner	50	Total for year	65 81
2 kilograms of meat	61		
Dried and green vegetables	47½	Grand total for year	254 08
Salt and spices	12		
Coffee and sugar	57		
Herrings, vinegar, and oil	14½	His wages amount to $8.569 for every two weeks, and annually (deducting 12 holidays)	214 14
Coal-oil and rape-oil for light	19		
6 liters of beer	17		
Thread, ribbon, buttons, and needles	09½	Rent from a factory girl living in the house	10 23
Blacking and grease for shoes	02½		
Factory invalid fund	11½		
Private invalid fund	06	Entire income for year	224 37
Total for two weeks	7 23½		
Total for year	188 11		

No rent is included in the above statement, because his daughter, grown up, pays for it with money earned by sewing, but he boards her free of charge.

[Circular.]

DEPARTMENT OF STATE,
Washington, April 27, 1886.

To consular officers of the United States in Europe:

GENTLEMEN: You are instructed to report, at your earliest convenience, upon the extent and character of the emigration from the consular district in which you reside to the United States. The importance of this question at the present juncture will doubtless impress upon you the necessity of a full and fair report, covering not merely the statistics of emigration, but the general habits, morals, and social condition of the classes of the population which contribute most to the emigration. The following specific questions are merely to serve as a guide in preparing the reports. You are not, however, expected to confine your replies to them, but to contribute whatever may serve to determine the general condition of those seeking new homes in the United States.

(1) Statistics—a series of years, or since 1873, would be desirable.

(2) Classes which supply the greatest number of emigrants, agricultural, industrial, &c.

(3) Causes of the emigration, such as compulsory military service, onerous taxation, strikes, surplus population, &c.

(4) Social condition; tenants or landowners; well-to-do or paupers; general manner of living as regards housing, eating, and clothing; marriage and divorce facts: children, natural and legitimate. This branch of the inquiry will apply to the whole population of the district, and not to the emigrants merely, though it will be well to examine particularly as to that part of the community.

(5) Do you know of any deportation of chronic paupers or insane persons, with or without Government aid? Or of any "assisted" emigration; and, if yes, how do these "assisted" emigrants compare with those who leave their country voluntarily?

(6) Attitude of Government towards emigration; and, if unfavorable, what obstacles are thrown in its way?

(7) Special privileges or rates of fare offered by Governments or corporations to induce emigration, and how have these circumstances affected the emigration to the United States?

I am, gentlemen, your obedient servant,

T. F. BAYARD.

AUSTRIA-HUNGARY.

BUDAPESTH.

REPORT OF CONSUL STERNE.

I regret that I have not succeeded in obtaining the exact figures, but from all that I could gather it will be safe to assume that about 70,000 in all will cover the extent of such emigration within the past twelve years; further, that previous to the year 1874 this movement was not of a size worthy of mention, unless I would refer to the emigration which took place in consequence of the revolutionary troubles in Hungary of the years 1848–1850 (the time of Kossuth), the results of which compelled a number of people to leave their country.

These "emigrés" all belonged to the best classes of society, and I believe that those who remained in the United States eventually proved a valuable acquisition to our country; many of them, however, returned to their native home after a total amnesty had been granted.

CLASSIFICATION.

The emigration from Hungary deserves to be classified as follows: Firstly, into what can be called general emigration by individuals from all classes of the people and from the greater part of the state; and secondly, into a systematic movement *en masse* by one class of people only, and only from one district of the state. My attention has been principally confined to the latter class, and I wish it to be understood that the details given in this report refer more in particular to the same.

The great mass of these emigrants belong to the agricultural class, but also include some who have been employed in the timber-industry and in mines; in quality they all represent what is called "raw labor" and of the "rawest sort" at that, since in their occupations they have thus far been very little accustomed to the use and the handling of machinery or improved tools.

CAUSES OF EMIGRATION.

"Hard times" is the main cause of the emigration from here as it is from other countries, with the difference, however, that here these "times" either did not exist as early as in other countries, or, if they did exist, they were not felt by these people, on account of their peculiar stage of culture.

Overpopulation is certainly not one of the causes of this emigration. To the contrary, Hungary, in its manifold resources, has the capacity of holding a much larger population than it has, especially when compared with other continental states of less resources.

That, under such conditions, there should be any emigration at all is to be accounted for by the fact that since about 1873 the state has totally lost its dominating position as the granary of Europe; that the strong competition by other countries has caused its main industry, agriculture, to become far less profitable than it once was.

This changed state of affairs has brought the usual consequences, first of all, reducing wages, and, further, compelling proprietary producers to resort to a more general introduction of labor-saving machinery, thereby actually creating a surplus of this branch of labor, while the development of other branches of industry has not been rapid enough to give employment to those who have thus been deprived of work. Much of this surplus is drawn to the cities, where there are efforts now being made to develop the industries, but a part of it is compelled to leave the country to obtain the means of living, and thus the movement to America has been brought about.

The last census of Hungary demonstrates this clearly, for while the cities show quite a gain in most cases, there are some of the rural districts which, instead of increasing, have hardly held their own in the past decade.

High taxation has of course much to do with causing emigration, but in this case more indirectly through its influence on the standard of wages and in causing an increase in the cost of living. The improved and increased means of transportation have also had their influence on the latter in advancing the prices of the main staples of life where they are produced, and which is thus most severely felt by the rural population, while the same means have actually made possible and introduced some items of expense and even extravagance which before the event of railways had never been dreamed of by these people in their simplicity of mind, habits, and tastes.

Compulsory military service, though nowhere cheerfully submitted to, is not a cause of this special class of emigration, for those who go away have either absolved their duty already or they intend to do it when they return; this " return" being explained further on.

The idea of a "strike" is thus far as little known to these people as that word itself may be, but dull and slow as they are individually they possess, " as a mass," so much the instincts of sheep that they can only too readily be taught and induced to follow a leader, whom they will follow " blindly," thus increasing the danger should their otherwise non-dangerous inclinations be turned into a wrong direction by evil-minded persons; this all the easier since their education is so very defective.

POLITICAL CAUSES.

Though not directly belonging to the special object of the inquiry, I will here say that since the advent of extreme nationalism (Chauvinism) in the politics of Europe there is a sort of migration in practice, especially in the southeastern portion of the continent, by which Hungary, as one, yearly loses some of its population, though she also makes some gains by the same cause. It is brought about by this that the several nations of this part of Europe, since they have succeeded in establishing a more fixed status as nations, are making efforts to repatriate the descendants of those who have been lost to them during the voluntary and involuntary *Völker-Wanderungen* of the past centuries, and a success in this is made quite possible from the peculiar fact that though these different peoples have been thrown together for ages, many of their descendants have retained the tribal characteristics of their ancestors in general appearance, habits, and character, as well as their likings or prejudices of race, not to forget also of language.

Of all these states I believe there is none which has been as much the turbulent field of these movements of peoples as Hungary has been; in consequence of which she is even to this day the greatest conglomerate nation existing—for, though ages have passed these races have not assimilated to a great extent, which in its turn is much due to the fact that these races occupy by large majorities different portions of the state and have thus been or are thus able to retain their own characteristics. Much of the old rivalry is yet existing amongst them all; and, since some of them at least believe themselves oppressed by the dominant race, it is comparatively an easy matter to induce some of them to return to the homes of their ancestors, where in turn they may enjoy the satisfaction of belonging to the great majority, though for solid benefits they are seldom benefited by the change. The interested parties, in this case the neighboring states, see to it of course, even if not officially, that the necessary sentiment is developed and that the necessary means are furnished to smooth the way homeward.

I find after all that the previous remarks were in place, for they go to show that there are people living in Hungary who though in close contact with others for many years and whose interests seemingly and reasonably should be the common ones, have retained their individuality to such a degree as to prevent their becoming citizens of their state in its fullest sense; just such a class are those who furnish the principal contingent of the emigration to America.

They are the Slovacks and belong to the Slavonic race and they inhabit principally the northern counties of the state, which are proverbial for their poorness of soil and general resources, in consequence of which the Slovacks are also the poorest people in the state.

Notwithstanding this and all I have said about race feeling, these people feel much attached to their mountain homes and will only leave them when necessity compels them to do so, but then always with the fixed determination to return to their homes as soon as their aim has been reached. This aim, when going to America, is to make what is a fortune in their eyes, and in this they usually succeed in about three years. When they move about nearer to their homes they usually remain away during the season of harvest or during the building season in cities, and then their object is mainly to provide the means for their long winter; and while they are thus away they conscientiously send home supplies to their families.

CHARACTER OF EMIGRANTS.

It is usually the men only who thus leave their homes, and, though at all times practicing the closest economy, they will when away even strain a point so that their object may be attained the sooner, and at such time they can be said to fairly compete with the Chinese as far as the most penurious practices of economy; and were it not for their love of strong drink they could fairly be called the most frugal people living as far as the demands of the body go, and I may say here that the above inclination has a great deal to do with their impoverished condition.

More directly in answer to your queries I will say that I believe none of these emigrants to be paupers, nor is there any danger under reasonable circumstances that they may become such in America; for, unlike the gipsies of Hungary, the Slovacks are not born beggars; to the contrary, these are always willing to work, and all the harder if by doing so their object may be reached the sooner.

Many of them are strictly day laborers and never possessed property beyond a little house or hut and an acre or two of the sterile land of their section. From that these are called *Klein-Häusler*; that is, owners of small houses. Others of these emigrants have possessed as much as 30 acres of land (this quantity seemingly being a sectional land unit with them), but they have either lost this entirely or are so much in debt that, at home, nothing short of a miracle can save them from total ruin. To either possess such wealth as this or to recover it where lost is generally the utmost limit of all their ambition.

HABITS OF LIVING.

Their manner of living is the very plainest; their homes are often nothing but scanty huts, of one room, wherein the whole family lives and sleeps promiscuously. The furniture and outfit is very primitive, mostly home-made and has to last for generations. The same can be said as to their clothing, "biled shirts" being quite an unusual luxury with the men. The body clothes of the latter are made of coarse linen, their summer clothing of the same material, only coarser, and in winter their clothing consists of suits made from a coarse and thick woolen felting, in the natural color of the wool; an everlasting cap of sheepskin and a pair of sandals about complete an outfit which has been in mode with them for generations and which may be heir-looms, since the style hardly ever changes.

A very important part of their outfit is the very roomy and long mantle without sleeves, made up from half a dozen sheepskins which are tanned, the wool being left on; these "overalls" are ever with them, and, as the season may demand, are worn either with the wool on the in or out side, and when the men are away from home these mantles form their complete bed. What these patriarchal cloaks may lack in style is generally made up for by some gaudy embroidery or even painting on the leather side of it, just as also the bodices of sheepskin are "trimmed," which the women wear in winter. The many and wonderful "discoveries" in dress of the female world at large has not yet reached these women, and their extravagance usually spends itself in the acquisition of a number of high-colored handkerchiefs and ribbons for head and shoulders, though some of them who have traveled beyond their home limits have gone as far as to adopt the red or yellow top-boots of the Hungarian peasant women.

I do not wish to be unjust to these people, but from all I can learn their demand for water is but very limited for the use of the outer body as well as the inner.

FOOD.

At home their diet consists principally of milk, potatoes, corn and rye bread, coffee and the meats being reserved luxuries of the wealthier for Sunday or holidays.

While laboring in cities there is added to the above, if such can be done cheaply or gratis, the remnants or offal from the restaurant, or if times are specially "flush" with them fresh meat is bought from the butcher in the shape of the lungs, livers, or other unpopular but cheap portions of the beef. Their preferred drink is a sort of brandy made from potatoes or prunes, the latter called "*slivovitz*," and since the presence of the Slovacks in America this brandy has become an article of export from here to the United States.

In all, it will be seen that the tastes of these people are anything but refined, are low, in fact, and the only thing which may be said in their excuse is their ever-present object to economize for the sake of their families. Other excuses could no doubt also be brought to their aid, but since these do not belong to the sphere of the present inquiry I shall not touch upon them.

With the same stated object, they are, when employed *en masse* in the cities, not very choice as to the quantity, quality, or even set of their bedfellows. Thus as many of them as can, men and women alike, will pack themselves into a room or cellar over night, and without the least regard to cleanliness or comfort.

The sanitary consequences of such habits form a standing threat and danger to the health of this city for instance, and the authorities often are compelled to make raids at night to dislodge these disease-breeding pest holes.

MARRIAGE AND DIVORCE.

Marriage is quite common with these people; but, since divorces either cannot be obtained on account of obstacles of religion or on account of the expenses connected therewith, many of the people of necessity fall into a state of concubinage, or wild marriage (*Wilde Ehen*), and this has become so general also amongst the poor classes of the whole state that it forms a publicly acknowledged evil. This also is one of the main causes of the large proportion of illegitimate children in the state, though the statistics show that just amongst these Slovacks the showing is not as unfavorable as in other portions of the state, or especially in the cities.

(Exact statistics covering this and other points of the inquiry will appear in a body at the end of this dispatch.)

Another cause of the number of illegitimate children here in general is the fact that the young men practically cannot marry until their military duty has been absolved. In justice to these, however, it must be said that in most cases they assume the responsibilities which were the fruits of their peculiar form of courtship as soon as they return from the army by marrying the mothers of their too previous children, and it is quite fortunate for these "otherwise" poor mothers that in their case a common rule is reversed, in that it permits "public opinion to adapt itself to circumstances," thus making it not only possible but even "the" proper thing that such marriages do take place.

Certain is it that an overamount of sensuality does not exist amongst these people and is not the cause of their seeming immorality; at any rate a diet as described is usually not apt to develop the former.

Abject poverty and dependent position have far more to do with the things as they are; thus the females of the poorer classes often lack the necessary powers of resistance, and lack of proper education has done the rest to rob them of the needed sense of discrimination; and though serfdom* has ceased to exist for very many years, I think there are those yet to be found in this country who are not yet fully aware of 'all" the boons which emancipation has brought them.

MORTALITY AMONG CHILDREN.

As also properly belonging to a description of the Slovacks, I shall say that the mortality amongst their children is large beyond proportion, and this is also an evil which exists again in the whole state.

In consequence of this, though births occur in rational numbers, the population of the whole state does not show a satisfactory increase.

This mortality exists nearly altogether amongst the poorer classes, and is caused often by the rude, barbarous treatment of the children by their mothers, by their ignorance of all ideas of hygiene, and many times by their superstitious practices, which often interfere with calling in the aid of medical advice and remedies.

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*That is, the particular shape of it that existed here.

ASSISTED EMIGRATION.

I have no knowledge of any deportation of chronic paupers or insane persons with or without Government aid.

"Assisted" emigration there has been a few years ago, as already referred to in my dispatch No. 2, of May 19, 1880. While I have not been able to lay my hands on to any positive facts I will say that it is generally known that many of these emigrants have been secured by labor contractors at the beginning of the movement, while now it is kept up by the aid which desiring emigrants receive from friends who are already in America. Besides this, there is every reason to believe that transatlantic transportation companies do their share towards making these people "travel."

ATTITUDE OF THE GOVERNMENT.

The described shortness of population, especially of the laboring classes, causes the authorities of the state and the owners of estates to look with the greatest disfavor upon the movement.

The authorities use every possible method to repress the movement, but the most effective remedy has been lost to them when the compulsory passport system was abolished. Though passports are not issued to people who may be in debt or who have attained a certain age and not yet absolved their military duty, these always find a way to leave the country when they want to go; and the people who are not in debt and who can obtain passports are not those who want to go.

Another repressive measure resorted to is to keep close watch upon the movements of suspected emigration agents, and I am sure that these are shortly dealt with when caught at work.

Much stress also seems to be laid upon giving publicity of any piece of unfavorable information concerning the United States, and all the newspapers of the country seem to be alike willing and patriotic in aiding the Government in this object. but all labor is certainly wasted in this instance as long as the Slovacks in America continue to send their little checks of money to their friends in this country, and though these are usually but very small sums, they represent vast fortunes to these modest people.

I believe there would not be so much objection after all to this emigration were it only money that the people send or bring back to their homes; but something is imported thereby which but few continental governments seem to digest with a good grace, that is, "American ideas"; and in this case I believe that this Government cannot be said to be altogether wrong if they treat this article with suspicion, for crude as these Slovacks leave their country, crude they also return, for their exclusiveness and love for herding result in their imbibing while in America not ideas of real "liberty," but ideas of "license." Thus the emigration is not only an economic loss to the state, but also carries with it items of social and political danger, and no wonder that the Government would by all means like to stop it.

INDUCEMENTS TO EMIGRATION.

This Government and the transportation companies of this state offer no inducements to emigration; the latter are either owned by the state or so much under its control or influence that it would be inconsistent for them to act otherwise.

GENERAL CONCLUSIONS.

I am of the opinion that with the present condition of the labor market in the United States there is no room there at present for this class of people. I even believe that under more favorable conditions in the United States these Slovacks are not a desirable acquisition for us to make, since they appear to have so many items in common with the Chinese.

Like these they are extremely frugal, the love of whisky of the former being balanced by the opium habit of the latter.

Their ambition lacks together in quality and quantity. Thus they will work similarly cheap as the Chinese, and will interfere with a civilized laborer's earning a " white" laborer's wages.

Like the Chinese, again, they are very exclusive people, and though American institutions may go a great ways towards removing this defect, it will surely require generations to make them enlightened citizens, where emigrants of other nations only needed a few years.

Of their habits I shall not speak, since the changed situation would undoubtedly act wonders in this respect in a short time.

Another main objection to them is that, like the Chinese, they do not intend to remain in our country, not even as long as the latter, though like some of these, also, an occasional Slovack may "stick." But to show how sincere and strong their intention is to return home when they emigrate, I will state what I have from very good authority, namely, that some of the better-to-do families give their daughters in marriage to men upon the special condition, that after a reasonably lengthy honeymoon the husband must go to America to make his fortune, when he may come back again to his wife, and while thus away they all conscientiously supply their families with the necessary means of living, thus again, like the Chinese, becoming no permanent benefit to the United States, their earnings never staying in the country.

To say a last word about these Slovacks, they are, after all, a people more to be pitied than anything else, but charity should begin at home.

In addition, I shall now say a few words about the emigration by individuals, first referred to, but a very few remarks will describe this, since it is very much of the same sort as has left the Continent for years and which should be well enough known in the United States. While the Slovack emigration sometimes depopulates whole villages, the latter consists simply in the leaving of an individual now and then and from any part of the state, and these are then most generally the Hungarians proper, or, if a particular sect may also be named, sometimes the Jews.*

Neither of them like to leave their country, and they only go in the hope of improving their financial situation.

They are mostly farmers or merchants who have not succeeded at home, now and then a discontented mechanic or tradesman also goes, though I believe that very few of them all would leave, even under pressure, were they to know that also in America people have to work, and work even harder than is done here, if they would accomplish anything.

I believe that many of these would not need to be hurt in their patriotism and could remain in their beloved Hungary were they to work with the same perseverance and judgment as might be desirable; but it is not my business to lecture these people, and the character of them has been once already described to the Department.

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* These Jews ought not to be confounded with those who during the last few years have been emigrating in masses from Russia under a sort of political or moral compulsion, and who comparatively seem to be of a very low standard as a people. The Hungarian Jews who emigrate usually go singly and quite voluntarily, not at all by any pressure in the shape of policy of state or of public opinion. As a mercantile people they go simply because their home does not seem to offer them the necessary field for their commercial enterprise.

As a class I can say for them that they are intelligent, quick, and capable, and under any reasonable conditions in the United States they will succeed and become valuable citizens of our country.

Following are the statistics relating to the subject, taken from a census at the close of 1884:

Total population of the state, exclusive of Croatia, Slavonia, and Fiume, 14,341,276. The number of marriages during the year, 144,416; of divorces, 1,047. The total number of marriages in the three countries from which the Slovacks principally emigrate, and having a total population of 696,549, are, marriages, 6,424; divorces in the same countries, 25.

The number of illegitimate children of the whole state is 55,243, out of a total of births of 660,068; in the above countries, illegitimate births, 2,068, out of a total of 26,565.

The total number of deaths in the whole state is 449,621, of which 233,378 fall upon children under five years of age.

In the above countries, total of deaths, 18,144; of which children under 5 years, 8,558.

These figures will speak for themselves.

HENRY STERNE,
Consul.

FRANCE.

REPORT OF CONSUL MASON, OF MARSEILLES.

The statistics of emigration from this port during the past eight years present the following exhibit:

Years.	Emigrants.		Nationality.		Total.	To the United States.	
	By sea from Marseilles.	By rail via Havre, Bordeaux, and Antwerp.	French.	Foreign born.		French.	Foreign born.
1878	5,745	4,589	177	10,254	10,431	18	243
1879	12,182	7,139	536	19,785	20,321	43	5,183
1880	10,072	4,784	708	14,148	14,856	83	3,593
1881	13,305	5,045	859	17,491	18,350	60	3,615
1882	15,863	7,112	799	22,176	22,975	114	3,875
1883	13,967	9,069	803	22,233	23,036	73	5,654
1884	6,482	2,494	472	8,504	8,976	71	630
1885	7,863	3,785	538	11,113	11,651	46	1,141
Total	85,479	45,117	4,892	125,704	130,596	508	23,934

It thus appears that during the past eight years the native French emigration from here to the United States has averaged only sixty-three persons per annum, a number too insignificant to form the basis of any elaborate analysis or conclusions.

Of the alien emigrants who sail from this port not less than nine-tenths are Italians, who either come here from Piedmont with a view to embarkation, or are shipped at Naples upon Marseilles steamers, which are sent there for that purpose. These steamers return to this port to complete their lading and then clear for ports of South America, and it thus occurs that thousands of Italian emigrants are registered as coming from Marseilles, whose only knowledge of this city is the little they have seen of it from a steamer moored during two or three days in the harbor. The vessels of the two regular steamship lines from here to New York touch, *en route*, at Naples or Palermo, and it is there that they mainly receive the thousands of emigrants whom they land every year at Castle Garden. For these reasons only a trifling minority of the emigration which comes nominally from Marseilles can be considered as within the province of this report.

When from a great port like Marseilles, having direct connections with nearly all parts of the world, the aggregate emigration of native French citizens to all countries averages only six hundred a year, it may almost be said that the people of Southeastern France do not emigrate at all. The reasons for this are sufficiently obvious. Persistent and extensive emigration uniformly has for its causes either extraordinary industrial depression, a superfluous population, an oppressive home government, religious persecution, or a restless, nomadic character which impels people to alter their habitat for the mere sake of change.

None of these conditions, except perhaps the first, prevail in Southern France. French people are, perhaps more than any other in Europe, home-loving and patriotic. In general they know very little of foreign countries. They are taught to believe that no country is, on the whole, comparable with their own. Of those who emigrate a majority leave their families at home, and go abroad with the hope of making a fortune in a few years, with which to return and spend the remainder of their days in their native land. Their Government is not oppressive, and it guarantees freedom of religious faith and worship. The rate of taxation is high and military service rigid and burdensome, but the Frenchman recognizes the fact that the taxes which he pays and the martial service which he renders are alike necessary for the support and defense of his Government, and there are few things which a French citizen is not willing to do for the preservation and glory of France.

As a people the French are almost entirely destitute of the nomadic instinct. They lack the facility of the Germans and other European nationalities for acquiring foreign languages and adapting themselves to new and strange conditions of existence. They are not naturally colonists. Life abroad, even under the best conditions, is regarded an exile, to be endured rather than sought for and enjoyed. Moreover, there is no part of this district, except perhaps the city of Marseilles, since the blight of epidemic has fallen upon its commerce and industries, where the population may be considered redundant. In several departments, notably the Basses-Alps and Vaucluse, the population is steadily declining, and there are villages and communes where this decline already causes apprehensions for the future of agriculture. In many districts the land is so rough and difficult that the use of labor-saving farming machinery is practically impossible, so that productiveness can only be secured by a large and constant outlay of manual labor. Whatever reduces the rural population therefore trenches directly upon the productive capacity of the land.

GOVERNMENT AND EMIGRATION.

The French Government imposes no legal obstacles to emigration, but its influence and spirit are openly against it. Public journals which are in political accord with the administration are especially active in publishing discouraging reports from colonies and immigrants in foreign countries and in urging their readers to be content at home. For the reason, already stated, that most French emigrants expect to return home after having accumulated a fortune abroad, a large proportion go to South America, which, being a comparatively new and sparsely peopled country, is supposed to offer special opportunities for rapid accumulation of wealth.. The few who go to the United States are mainly those who have relatives among the people of the Gulf States, or artisans who seek in the great cities of the Atlantic coast a more profitable field for their skilled labor. The one exception to this which has come under my observation has been a movement on part of a small number of young men from the neighborhood of Montpellier, who have sent one of their number to examine the soil and climate of Texas, with a view of establishing there the culture of wine.

It follows from all this that the very limited emigration from this part of France to the United States includes little or nothing of those elements which are coming to be recognized in our country as dangerous and undesirable. The Marseillaise, notwithstanding their record in French history, are neither agitators nor anarchists, and until the recent strike among the coal-miners at Decazeville (just outside the limits of this district) there has been, during the past five years, at least, no serious revolt of the laboring classes in this part of France. There are in this city communists who hold secret meetings and rejoice over the disorders created by their clans in other districts and countries, but they are under careful police surveillance and make no serious demonstration, politically or otherwise. During the communal troubles of 1871, communists, to the number of perhaps 300, rose and seized the prefecture, from which they were subsequently driven by the Government troops, but even this small band of revolutionists were mostly Italians or fugitives from Northern and Central France, and their movement received no active support from the local population. Business went on as usual, and when the abortive revolution was suppressed popular opinion approved the execution of its leader and the transportation of his confederates.

During the recent elections, one candidate of communistic antecedents was included in the list of deputies, but he fell 10,000 votes behind his colleagues, and his recent attendance at Decazeville and his outspoken sympathy with the disorders there have been generally regarded with ridicule.

FRENCH INDUSTRIES.

The industrial situation, which here, as elsewhere in France, is in a state of depression, unless relieved, must compel some increase in emigration. Besides the general causes which during the past five years have affected more or less all French industries, the effects of two successive epidemics of cholera, followed during the past six months by the most prolonged and severe visitation of small-pox in the history of Marseilles, have been disastrous to all classes of commerce and manufacture. Among the coal-miners of this district 11 per cent. of the usual working force was discharged or idle during 1885.

Out of forty manufactories of olive and seed oils, twelve were closed during the year. In the iron manufactories from 5 to 10 per cent. of the workmen were discharged. Among the steamship lines the depression was still more marked, and their average reduction of employés was not less than 30 per cent.; of the workmen in tanneries, 20 per cent. were dismissed for want of work; in the manufacture of bricks and tiles, the force of 3,340 men employed in 1883 was reduced last year to 2,120, a loss of 36 per cent.; out of seventy flouring mills in this department twenty were closed last year, and the remainder for most part were operated only by day, so that fully one-third of their former employés were discharged.

Nothing could more clearly illustrate the peaceable, submissive character of the Provençal working classes and the satisfactory relations between them and their employers than the fact that this steady and prolonged reduction of working force in these several industries provoked no revolt or disturbance. In many cases the suffering and destitution have been pitiful, but the discharged workmen recognize the depression of business as the real cause of their distress, and patiently hope for better times. Mendicancy has increased, and several meetings have been held by the port draymen and laborers to protest against the increased duty on cereals, which has enhanced the price of bread and largely reduced the import and handling of grain at Marseilles, but, as we have already seen, the growing distress of last year produced no appreciable effect upon emigration. Only 538 native French citizens emigrated from here during 1885, and of these 46 only were destined to the United States.

The most noticeable reaction has been against the foreign laborers—notably Italians—whose presence overcrowds the diminished labor market. There are in this city more than 54,000 Italians, who hold toward the native laboring classes a relation somewhat similar to that of the Chinese in the Western American States.

The Italian laborer is quite as industrious and even more economical than the Frenchman. His wants are so few and simple that he can exist upon a small percentage of his earnings, and in a competition of wages he underbids the native laborer. In several parts of this district there have been heard recently sharp protests, attended in some instances by violence, against the Piedmontese, who swarm across the frontier and seek employment in mines and tanneries and upon public works; but these manifestations have been promptly suppressed and denounced as uncivilized and dangerous to French working-people in other countries.

It is not probable that industrial depression will, in future, compel any important increase of emigration from this country. Besides the ingrained national aversion to wandering, there remains the fact that France produces no surplus population.

A comparative study of the birth-rate of this and other European countries shows France to be the lowest, except Ireland, in the scale of human production. While England has a yearly birth-rate of 35 per 1,000 inhabitants, Bavaria 40, Belgium 51, Scotland 35, Spain 38, Italy 37, Germany 38, and Sweden 52, France and Ireland have only 27, and even this low standard of fecundity is steadily declining. In Marseilles, for example, the birth-rate in 1866 gave 1 birth for every 30 inhabitants, but this has gradually fallen off, until the average from 1881 to 1886 has been less than one birth to 35 of the registered population. This loss becomes still more striking when placed in contrast with the steadily increasing death-rate. In this city the birth-rate during the decade from 1860 to 1869, inclusive, was 4.7 per 1,000 inhabitants *in excess of the deaths*, and this notwithstanding the loss of 6,000 lives by the cholera epidemic of 1865–'66.

During the next decade, 1870 to 1880, a period which included no epidemics, the deaths were .83 per 1,000 inhabitants *in excess of births.*

Coming down to the past three years, a study of the vital statistics of Marseilles presents the following striking results:

Years.	Births.			Deaths.			Death rate per 1,000 inhabitants.	Excess of deaths over births.	Marriages.	Divorces.
	Legitimate.	Natural.	Total.	Total including suicides and murders.	Suicides.	Murders.				
							Per ct.			
1883	9,189	1,569	10,758	11,190	135	19	31.07	432	2,793	......
1884	9,133	1,645	10,778	12,500	104	18	34.71	1,722	2,704	4
1885	9,348	1,564	10,912	12,152	120	33	33.75	1,240	2,926	135

No census has been taken since 1881 until Saturday last (May 30), the results of which will not be announced for some time, but it is believed by those best informed that the population of Marseilles, which was 233,817 in 1856, 260,910 in 1861, 300,131 in 1866, 312,864 in 1872, 318,868 in 1876, and 360,099 in 1881, has not sensibly increased since that time.

Theorists attribute the decline in the birth-rate of France, and also its increasing death-rate, to the employment of married women in factories and mines, instead of, as formerly, at home and in the fields. The result of substituting this prolonged and excessive labor, instead of the natural domestic duties of women, has been to greatly increase the proportion of still-births and raise the death-rate of children to startling proportions. According to a recent writer (Mr. Pierre Roux), 50 per cent. of all children born in France die before the age of five years. Taking at hazard two local and recent examples, we find that of 38 deaths during the past week at Toulon 24 were of children, while at Marseilles, during the same period, the proportion was 122 children in a total death list of 278.

Morally the condition of Marseilles compares more favorably, its percentage of illegitimate births being only 16 against 23 in Paris, 25 in Brussels, 14 in Berlin, 24 in St. Petersburg, and 41 in Moscow.

The remote causes of a physical decline which, according to published statistics, now causes the rejection for disability of one-third of the 300,000 conscripts annually drawn for military service in France, are of course far beyond the scope of this report, but the facts herein stated will sufficiently explain the limited and decreasing native emigration from this country, and the efforts of the national and local governments to conserve their physical resources by encouraging their people to remain at home.

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Marseilles, June 7, 1886.

GERMANY.

BERLIN.

REPORT OF CONSUL-GENERAL RAINE, OF BERLIN.

STATISTICS.

It is a noticeable fact that German official statistics furnish no classification of the occupations of emigrants. Nor can a comparison be made with our own emigration statistics, as the latter are published for the fiscal year, while German statistics are based upon figures for the calendar year. The discrepancy in the numbers of emigrants to the United States between the statistics of the United States and Germany is explained by the fact that the statistical bureau of the German Empire has control only over figures gathered in German ports since 1872 in Antwerp, and also using French sources in Havre, but has no control over the number of German emigrants embarking at Dutch and English ports, though it may be conceded that a considerable number of Germans emigrating by way of the latter ports go to the United States.

From the above it appears that our returns, generally, state the number of German immigrants higher than German returns, of which I first inclose a table showing the number of German emigrants via German ports and the Belgian port of Antwerp, for the fifteen years from 1871 to 1885, amounting to 1,412,914.

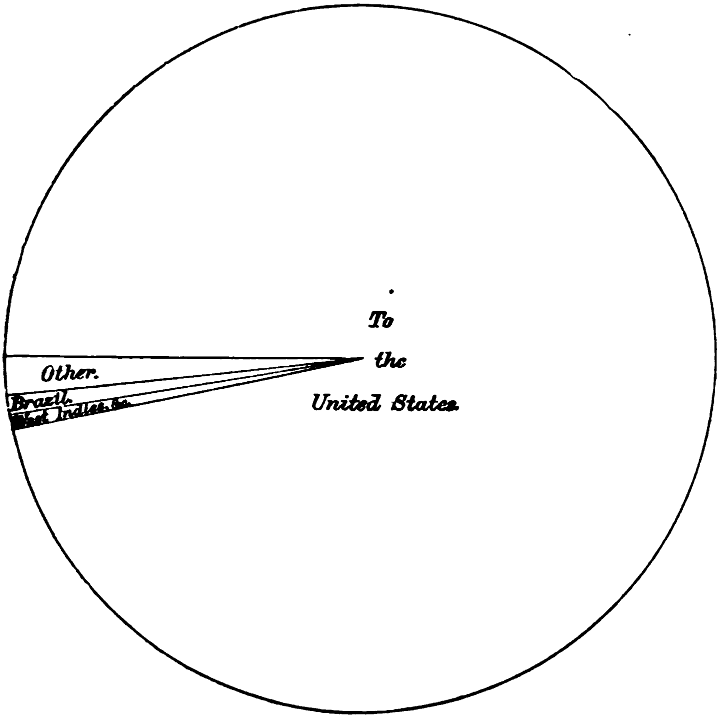
To this number of emigrants must be added the number of German emigrants embarking at Havre. But in this case the country of destination cannot be given. The total number of emigrants would now be as follows:

Years.	Via Havre.	Via German ports, Antwerp and Havre.	Years.	Via Havre.	Via German ports, Antwerp and Havre.
1871	287	76, 199	1879	2, 485	35, 812
1872	2, 598	128, 243	1880	10, 757	116, 947
1873	6, 776	110, 414	1881	10, 251	220, 798
1874	2, 511	47, 623	1882	9, 590	203, 459
1875	1, 489	32, 262	1883	7, 455	173, 574
1876	1, 258	29, 626	1884	5, 393	148, 979
1877	939	22, 903	1885	2, 790	106, 432
1878	1, 399	25, 616			

Hence the grand total of all German emigrants within the said fifteen years (1871 to 1885) amounted to 1,478,887. A comparison of the German emigration with the over-sea emigration of other countries is shown by the following table:

Countries.	1880.	1881.	1882.	1883.	1884.
Great Britain and Ireland	227, 542	243, 002	279, 366	320, 118	242, 179
France	4, 612	4, 456	3, 848	4, 011	3, 768
Italy	35, 677	43, 725	67, 632	70, 436	57, 904
Switzerland	7, 255	10, 935	10, 896	13, 502	8, 975

DISTRIBUTION OF EMIGRATION FROM GERMANY IN 1884.



Of every 100,000 inhabitants, there emigrated in the years 1878, 1880, 1885, in which years the absolute figures of emigrants from the whole Empire were nearly equal:

1873	103,638
1880	106,190
1885	103,642

The different parts of the German Empire lost the following numbers of persons emigrated "over sea" for every 100,000 inhabitants:

Where from.	1873.	1880.	1885.	Where from.	1873.	1880.	1885.
East and West Prussia	492	857	720	Wurtemburg	254	444	258
Brandenburg (including Berlin)	125	134	169	Baden	297	311	220
				Hesse	235	326	259
Pomerania	959	691	762	Mecklenburg (both)	1,085	241	393
Posen	702	601	586	Oldenburg	363	299	402
Silesia	57	70	71	Brunswick	93	103	76
Saxony (province)	72	63	87	Thuringian states	148	118	118
Schleswig-Holstein	596	569	561	Anhalt	64	55	45
Hanover	338	350	421	Waldeck	166	242	354
Westphalia	79	153	120	Lippe (both)	113	133	242
Hesse-Nassau	253	268	231	Lubeck	163	149	208
Hohenzollern	156	231	156	Bremen	408	560	589
Bavaria (right side of the Rhine)	184	183	166	Hamburg	331	339	368
				Alsace-Lorraine	30	17	48
Palatinate	281	263	307				
Saxony (kingdom)	96	139	92	Total	251	236	224

Emigration, by sex and age, in 1885.

Age.	Male.	Female.	Total.
Under 1 year	2,243	2,322	4,565
1 and under 6 years	4,945	4,765	9,710
6 and under 10 years	4,772	4,563	9,335
10 and under 14 years	2,263	2,028	4,291
14 and under 21 years	10,733	10,322	21,055
21 and under 30 years	16,068	11,710	27,778
30 and under 40 years	7,504	5,364	12,868
40 and under 50 years	3,700	3,191	6,891
50 and under 60 years	2,203	2,213	4,416
60 and under 70 years	1,101	1,112	2,213
70 years and over	213	175	388
No age given	82	50	132
Total	55,827	47,815	103,642

OCCUPATION.

As to the occupation of emigrants, no statistics are kept in Germany. C. Herzog, late Imperial assistant secretary (for Alsace-Lorraine), in speaking upon this subject, referred chiefly to American estimates.

Remarkably low is, according to his statement, the number of emigrants who have a professional occupation, about three or four per one thousand emigrants; but he infers that the number must be larger, as many persons of this kind go to the United States as mere visitors, and change afterwards from visitors into permanent residents. Such persons, not arriving in emigrant vessels, are simply recorded as passengers. Musicians, authors, architects, apothecaries, and professors of graphic arts seem to be quite numerous.

Within the group of skilled occupations, Germany is best represented in carpenters, shoemakers, tailors, blacksmiths, bakers, butchers, masons, and brewers.

Among miscellaneous occupations, Germany furnishes a large percentage of farmers (about 33.77 per cent.).

From Exhibit A it appears that the bulk of Germans go to the United States; only 3 to 6 per cent. are scattered in other directions. Of some note is also the emigration to Brazil.

CAUSES OF EMIGRATION.

The causes for emigration represent peculiar features. As Roscher, the renowned political economist, says:

> No incorrupt man will solve the tie which binds him to his parents, his father's house, his remembrances of childhood.

Apart from the few who have particular reasons of their own to see foreign countries, it can be safely asserted that the true cause of emigration is dissatisfaction with the conditions under which people live at home, and the desire to improve their personal and material comfort. Roscher has condensed them, as follows: Surplus population, surplus capital, surplus of educated men not available; finally, a certain political or religious discontent, hence disproportional relations to society (family, state, church, and property).

Regardless of the cause of surplus capital, or rather concentration of capital in the hands of a limited number of men, the facts stand forth that political and religious differences and dissensions in several epochs of history have resulted in extensive emigratious, particularly in times when either strong Governments were wanting or when Governments had been usurped by privileged classes.

It may suffice to allude to the Greek colonies of ancient times; to the colonization of Iceland by the aristocracy expelled from Norway, and, especially, to the origin of our own country.

Concerning modern emigration, it may be granted that, irrespective of those persons who, in conflict with social and other laws, preferred to leave their homes, a large number of persons went to our shores in order to find the "promised land" of liberty and equality, the land "where milk and honey flows."

The incomparably rapid increase of the United States in population, wealth, and political power, which, since half a century, has raised them to the rank of the first nation of the globe, exercised, of course, a great attractive power, with their enormous extent of untilled fertile soil, a quick and clever utilization of modern traffic facilities and the expediency of their political institutions, warranting to every one the necessary security for his person and property and fair play to develop his individual faculties.

Religious dissension is also one of the causes of emigration, as it was at the time of the Pilgrims, who first settled in our now so prosperous New England States, and two hundred years ago, when the Huguenots sought new homes in England, Ireland, and Prussia (then an electorate, Brandenburg), where, especially in the latter country, they became the founders of silk and other now thriving industries.

To what extent the recent Prussian church (May) laws (now about to be abolished) have led Catholics to expatriate themselves, is beyond my knowledge. But, combining all these motives, the object emigrants had in view can thereby be explained only of a comparatively small number of them, but the matter stands different when we look at the surplus population as a cause of emigration. In my annual report* I gave a table showing the yearly increase of population for 1884 in several European countries, as follows:

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* Printed in Consular Reports No. 61, page 597.

Countries.	Increase.	Period of doubling.
	Per cent.	*Years.*
Germany	1.50	47
Great Britain	1.40	51
Netherlands	1.35	52
Denmark	1.28	54
Austria	1.15	60½
Belgium	1.13	61
France	0.36	200

And pointing to the necessity for Germany to extend her dominion, I continued to report that—

Even if we place the number of emigrants on the average at 80,000, according to German statistics, or more (about 100,000, according to ours), per annum, hardly 16 per cent. of the increase are absorbed by emigration.

As will appear from a table here appended, the excess of births over deaths for 1884 in Germany amounted to 550,953 in number, leaving for this year 407,367 as surplus population, when 143,586 emigrants are deducted from the total number of the excess of births.

The number of marriages concluded, births and deaths of illegitimate children will appear from the inclosed tables marked Exhibits B and C. These tables compare the figures of the decade of 1875 to 1884, both inclusive.

Concerning the question as to the density of population, Dr. Elreberg, of Erlangen, gave for the year 1880 the following percentage of men per 1 square kilometer:

Germany	83.7
France	70
Italy	95
England	110
Netherlands	128
Belgium	186

If guided by these figures, it can easily be seen that although Germany has not only a large population, but also a large yearly increase of population, yet it must be conceded that there are other countries with a still larger population, but without an emigration, that would reach even approximately the lowest number of German emigrants.

Untenable seems, therefore, the assertion that Germany suffers under an onerous surplus of population, since it is notorious that the provinces with smaller density, Pomerania, Prussia, Posen, &c., show the largest percentage of emigrants, and that national wealth is growing at the same ratio as the number of population increases.

In those provinces exist very extensive landed manorial estates, where there is no chance for small farmers to purchase a homestead, or for the settlement of agricultural laborers in large numbers, as there is no full work for all of them throughout the whole year. In many instances those landed proprietors have resorted to machines to dispense with a sometimes doubtful class of laborers who came from other German districts to find employment, for the different districts have different harvest times. But this migratory life, which large portions of such laborers are compelled to lead, has a detrimental influence upon their education. Nor does there exist in those provinces any possibility for them to get employment in industrial works, as there is no industry or mining, excepting perhaps the salt works at Inowrazlaw in Posen.

Thousands of working families pass through Berlin every spring to go to the sugar-manufacturing districts in the province of Saxony. In the fall they repass on the way home. Many of them use then their savings to found an undisturbed home in the United States.

INCOMES ARE DISPROPORTIONATE.

Though, as above stated, Germany's wealth, as a whole, increases with its population, yet the distribution of property is not normal and incomes are disproportionate. I give an example:

In 1885 Berlin's population amounted to about 1,300,000 persons; of this number about 200,000 were free from class-tax (the lowest tax collected), as their respective income did not reach the minimum of 420 marks, the limit for the payment of class-tax as prescribed by law.

One hundred and forty-eight thousand one hundred and twenty-eight had an income of 420 marks and upwards; 121,502 had 661 and upwards; 27,777 had 901 and upwards; 21,632 had 1,051 and upwards; 11,970 had 1,201 and upwards; 14,739 had 1,351 and upwards; 5,552 had 1,500 and upwards; 7,770 had 1,650 and upwards; 5,721 had 1,800 and upwards; 6,667 had 2,100 and upwards; 2,838 had 2,400 and upwards; 4,221 had 3,000 and upwards.

Taxes in Prussia collected on incomes from 220 marks to 2,999, both inclusive, are called *Klassensteuer* (class tax), while taxes levied on incomes of from 3,000 marks and upwards are called state income tax.

Still more instructive is a comparison of Berlin persons paying this latter tax. Of 1,250,000 inhabitants only 30,000 pay state income tax—5,100 had an income of 3,000 marks and upwards; 4,000 had 3,600 and upwards; 3,000 had 4,200 and upwards; 2,700 had 4,800 and upwards; 1,000 had 7,200 and upwards; 1,000 had 8,400 and upwards; 1 had 9,600; 1,100 had 10,000 and upwards; 820 had 12,000 and upwards; 101 had 18,000 and upwards; 81 had 54,000 and upwards; 81 had 60,000 and upwards; 56 had 72,000 and upwards; 52 had 84,000 and upwards; 43 had 96,000 and upwards: 23 had 100,000 and upwards; 27, 19, and 23 had more than 200,000; 8 had 240,000; 10 had 300,000; 5 had 360,000; 1 had 420,000; 5 had 480,000; 3 had 540,000; 4 had more than 540,000.

It is stated that from 500 marks, in the year 1869, the average income per year and person in Berlin went up to 627 marks in the year 1874; from and after this year such income went steadily downwards, reaching in 1883 the amount of 499 marks. Since then it went up again a little, to 534 to 555 marks. If overcrowded districts, which are mostly those where nearly exclusively manufacturing is carried on, contribute the largest percentages to the emigration, Berlin would be such a place; but, on the contrary, it attracts every year thousands and thousand of persons born in farming districts, who seek and find employment as servants, day laborers, &c.

The very same farming districts show also the largest number of emigrants, viz:

Districts.	Inhabitants per square kilometer.	Emigrants per 1,000.
Mecklenburg	43.4	44.9
Pomerania	51.2	44
East Prussia	52.3	22
West Prussia	55.1	22
Posen	58.8	34.1
Baden	104.1	18.1
Hesse-Nassau	99.1	14.8
Saxony	198.3	6.3
Rhineland	151.0	4.5

From this statement it is shown that the largest industrial districts, Saxony (Kingdom) and Rhineland, have the smallest number of emigrants, and *vice versa.*

OCCUPATION OF EMIGRANTS.

Herzog states that during the American fiscal year ending June 30, 1883, about 194,786 Germans immigrated into the United States; 857 of them were artists, authors, architects, chemists, &c. (professional occupations); 25,190 had skilled occupations; 51,282 were farmers, day laborers, servants, and dealers of goods, &c. (16,961 farmers, 25,586 day laborers, 3,357 servants, &c.); 117,161 German immigrants had no occupation whatever, being mostly women and children.

They are, therefore, mostly skilled artisans who emigrate, and farmers, day laborers, most of the latter being agricultural laborers, who will seek to get an independent existence after having done day's work for some time.

The percentage of emigrants out of men employed here in factories and mills seems to be of no account, as their inferior or one-sided training is their stumbling-block. They could find employment in America only as helpers at machines similar to those at which they worked at home. They would not materially change their condition in America.

PEASANT FARMERS.

But that formerly large portions of German population, consisting of mechanics, artisans who work at home and possess not only their own houses, but also small tracts of land which they till (in German also called *Ackerbürger*), being half farmers, half traders, they were and continue to be fittest for emigration. The probability of getting along better, or to improve their condition in America, is for them by far greater, as they are familiar with two branches of occupation. If farming does not pay or give employment, they resort to their trade.

To a much greater extent, however, than those house manufacturers, farming classes share in the number of emigrants. They have, through friends already settled in America, information sufficient to compare the condition of agriculture both here and in America.

As already reported in my annual report (see page 204 of Consular Reports, No. 61, February, 1886), last year prices of wheat and rye, the chief breadstuffs, notwithstanding the repeated increase of German tariff rates, were lower than ten years ago.

The present year, 1886, does not show any rise of prices at Berlin (the increase of duties took place in the years 1879 and 1885).

Breadstuffs.	1875.	1880.	1886.
	Marks.	*Marks.*	*Marks.*
Wheat	188.175	212.226	153.75
Rye	140.170	210.213	135.35

A farmer who thinks of the future will have the conviction that, under the circumstances existing, he will be compelled to struggle for life, a struggle which perhaps it will be impossible for his children and children's children to endure. Also, frequent cases may occur where agents, thinking only of their commission fee, depict to the German peasant farming life and other matters in America in a brighter light than they really are.

ROMAN INHERITANCE LAW.

In Germany the Roman inheritance law is in force, which allows, or rather prescribes, settlement of estates by partition, either *in natura* or in money. In the former case the dismemberment of even a large real estate makes a systematic rotation in farming impossible, while in the latter event the keeper of the estate may be involved in such an amount of debts that he gets ripe for bankruptcy. German states have no such law as the American homestead law to protect him from ruin.

The Palatinate in Bavaria, for instance, where the greatest dismemberment of real estates is said to have taken place in Germany, contributes, therefore, large portions to the number of emigrants. The brothers and sisters of the keeper of the estate, instead of allowing themselves to be lowered into the position of mere servants, prefer to go with the money they receive as their shares to America, where to go they are often invited by former fellow-countrymen, who send them sometimes tickets or money for passage.

One of the leaders of the German Colonial Association was some time ago informed by a member of the North German Lloyd, Bremen, that for many a year about 60 per cent. of all emigrants forwarded on board their steamers had gone to the United States at the inducement, and mostly with the assistance, of such members of their families as had already firmly settled in the New World.

This and many other causes and reasons tend to prove why the main stream of emigration continues to go to the United States. Other reasons are to be found in the relative shortness, safety, and cheapness of the passage, as well as in the facility by railroads to enter the interior of the country; in the possibility to acquire there real estate at a cheaper rate than in Germany; in the salubrity of climate, which is similar to that of Central and Northern Germany, and which admits of farming similar to the German; in the affinity of language and manners of the predominant Anglo-Saxon population with the German; and, above all, in the prospect to get an independent husbandry and homestead to live upon his own ground.

PAUPERS, INSANE, ETC.

It is conceded by parties familiar with the subject that persons having no such support emigrate only in a very limited number. It is even stated as a "deplorable fact" that the very classes of population Germany could most easily dispense with, such as idlers, financial and moral bankrupts, insane, light-minded, and paupers, participate only to a minimal percentage in the emigration. And the latest measures taken by our Government against landing of such persons may have considerably reduced even that percentage. It could, however, hardly be prevented that scapegraces, provided with all the means required by our laws, are shoved over to our shores by relatives and parties being ashamed or afraid of them.

Even during the short time that I have been in office I have had frequent occasion to learn from all sorts of letters and personal appeals what mischief is done, for instance, by fellows, sons, and other relatives of high, respectable families, who, in spite of all their talents and attainments, had to leave here. They were sent by their families to America and other countries for the reason that their morals had become a scandal.

TESTIMONIALS OF FITNESS AND CONDUCT, ETC.

But to recur to immigrants not desirable, it may be stated that, as a rule, by far the largest portion of persons above described, even if they were available, do not possess the passage money. Just the less skilled and poorest classes of the proletariat remain at home and perpetuate in their children pauperism and misery.

Cases, however, where communes, at their expense, might shift over to America such class of individuals, have, up to date, not come to my knowledge, though I have but little doubt that, by some means or another, persons of their kind have been shipped to the United States.

The bare resolution to emigrate on one's own strength, to defy the further uncertainty, and to be willing in new foreign relations to fight for a better existence than he enjoyed heretofore at his old place of domicile, presupposes a not ordinary degree of courage, self-confidence, energy, and vigor. Nay, it can be stated as a general rule that only middle classes can afford to emigrate, upper classes only exceptionally emigrating. It is even deplored in Germany that this diminution of the middle classes serves to enlarge unduly the gap between rich and poor, in the enlargement of which many other potencies are in full activity. It is further deplored that the very best industrial and productive classes, in comparatively large percentages, leave the ranks of German producers to enter the ranks of foreign competitors, taking with them millions of marks. Single statisticians estimate the loss Germany has thus far suffered (since 1820) at seven, others at twenty-two, others even at more milliards of marks.

Another question would be to what extent the sum flowing back, under the laws of descent, to the old country, serve to balance the account between the old and the new country.

MILITARY SERVICE.

If in former years, say prior to 1866, the burden of military service was borne unequally by the several German states,* this was no longer the case after the war of 1866, and there, where the innovation was more sensibly felt, military service must be regarded as a cause of emigration. After the war of 1870–'71 this applies also to Alsace-Lorraine. In fact the latter country, and after 1866 Hanover, had long lists of young people who tried to avoid military service by emigration. But this state of things has much changed since the general introduction of uniform liability to military service in all states of the German Empire has become customary. Of course no rule without exceptions.

Generally, Germans are fond of military matters. From the oldest times, when they first appeared in history, to the lansquenets of the Middle Ages and down to the present day, Germans have been known as brave warriors.

Throughout Germany there is now a well-connected net-work of so-called *Krieger-Vereine* (Warriors' Unions) of at least half a million in number, possessing a firm organization, with the express object of supporting order and the welfare of the "Fatherland."

The influence of a military training is observable in Germany everywhere. Everybody can make the same observation as reported by Consul Tanner, Chemnitz, under date May 28, 1886. Generally three years' service influences to a great extent the education of the people.

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* The general liability to serve in the army or navy existed only in Prussia.

Every able-bodied, moral young man, whether rich or poor, high or low in social standing, has to pass through the same school of strict obedience, order, promptitude, and faithful fulfillment of duties. How many an uncouth and feeble lad from the country has by such service become a manly, versatile, and orderly fellow.

Convinced that there is no true liberty without order and subordination, they transplant such principles into their civil life, into their families. The husband is in Germany the head of his house; wife and children range according to their natural standing and duties.

TAXATION.

To what degree taxation induces to emigration can hardly be stated. If business is good and incomes are sufficient, of course the collector of taxes meets with but little difficulty, but if their suppositions do not hold true, the collector of taxes is to the common people a dreaded person, who appears often where there is no farthing in the purse. Then a notice is left that if taxes have not been paid within a short time thereafter execution shall take place.

Prince Bismarck read some years ago an amusing number of such executions to the Reichstag, which had taken place, especially in the larger cities; and he did so to induce the Reichstag to decide in favor of indirect taxation, or, at least, of abolishing class taxes collected on a lower amount of income than 1,200 marks.

As all direct taxes cause much complaint and uneasiness, particularly among lower classes of people, the German Government has repeatedly declared that it is their earnest endeavor to gradually transform direct into indirect taxation by increasing import duties and taxes on tobacco and whisky, but these efforts have had as yet but little result, as such measures are much opposed by the Liberal and "Centrum" majority of the present Reichstag, which seems to fear that direct taxation would place a greater financial and political power in the hands of the Government than would be consistent with the rights of the Reichstag to provide every year for the necessary appropriations of the budget.

CLASS TAX.

In Prussia all persons having an income less than 900 marks ($214) are exempt from class tax, while persons with an income of from 900 to 1,050 marks pay 9 marks per year; 1,050 to 1,200 marks, pay 12 marks; 1,200 to 1,350 marks, pay 18 marks; 1,350 to 1,500 marks, pay 24 marks; 1,500 to 1,650 marks, pay 30 marks; 1,650 to 1,800 marks, pay 36 marks; 1,800 to 2,100 marks, pay 42 marks; 2,100 to 2,400 marks, pay 48 marks; 2,400 to 2,700 marks, pay 60 marks; 2,900 to 3,000 marks, pay 72 marks. Higher incomes pay a so-called state income tax. The income tax is levied on the income derived from (1) real estate; (2) capital; (3) trade, business, or from any paying occupation.

TRADE TAX.

This is levied on (1) commerce; (2) hotels, restaurants, inns; (3) manufactories and trades employing a number of assistants; (4) mill industry; (5) navigation, freight establishments, livery stables, &c.; (6) peddlers.

In order to estimate the amount of trade tax to be levied, it is customary to suppose a medium tax; thus, if there are 80 trade-tax payers in one class at a certain place, and the medium from the total of such tax hitherto paid is found to be 30 marks, the amount of the tax will be for the next fiscal year 30×80 = 2,400 marks.

In case the tax-payer is not able to pay the medium tax, a lower rate is granted him, and the amount falling short is added to the taxes of the other rate-payers, but the total of 2,400 marks must be paid by all the 80 trade-tax payers, no matter at what percentage each of them shares in this total, previously estimated and fixed by a committee of members, a moiety of which is chosen from the respective class of trade-tax payers, and the other moiety appointed by the Government.

This system is rather complicated.

TAX ON BUILDINGS.

This tax is paid for all buildings, court-yards and house-gardens belonging thereto, if their area exceeds 25 acres 53 square meters (1 Prussian morgen equal to about 1 acre, 1 rood, 1 perch) in extent. Exempt therefrom are all public edifices of state, churches, schools. Tax is paid at the rate of 4 per cent. on the premiums derived from rentals of dwelling-houses, while 2 per cent. is paid on revenue from buildings devoted to industrial and commercial purposes.

TAX ON LANDED ESTATES.

This (ground tax) is paid in Prussia at the average rate of 9.50 per cent. on the net proceeds of such estates. Real estates belonging to the state and other commonwealths are exempt. In addition to these taxes collected for the state, the communes are under law permitted to collect so-called municipal taxes to defray the expenditures for local purposes. Many cities continue to levy an excise laid on articles of food (mill-ground articles, cattle, meat), imported for consumption (*Mahl- und Schlachtsteuer*). In Berlin this excise is not collected, but it derives its revenues from three other kinds of taxes, viz, from—

(*a*) *House tax.*—Paid by the owners of the houses, at present at the rate of 2½ per cent. of the amount of rentals received, and

(*b*) *Rent tax.*—Paid by the tenants at the rate of about 6⅔ per cent. of the amount of rental paid.

(*c*) *Municipal income tax.*—This is collected mostly at the rate of 100 per cent. of the amount of class or state tax paid.

School moneys are no longer collected in nearly all the larger cities, though in the country this is still the case.

GERMAN EMIGRATION LAWS.

CONSTITUTIONAL PROVISIONS.

An unrestricted right to emigrate was provided for under the constitution framed for the German Empire as it existed for a short time, 1848–'49.

The constitution afterwards adopted by the individual states of Germany recognized likewise the right of emigration as a fundamental one, but some of them added a restriction providing that it shall not be permitted by emigration to avoid the liability to military service. The same principle passed into the constitution of the present German Empire by placing reservists (minute-men) and landwehrmen on the same footing. Permission to emigrate shall be refused to them if they are called in for actual service.

With regard to infants, insane, and other persons having no political capacities at all, emigration can be restricted in all cases where the fulfillment of liabilities under the civil law may be frustrated by emigration.

According to Article 4 of the constitution of the present German Empire, the latter shall be competent in all matters of emigration under the state law, penal and civil law.

THE CIVIL LAW.

The civil law (administration, police law) refers to the emigrant taking with him his family and property, the (licensed) emigration agent, as representative of the ship-owner, the ship-owner himself, master, and crew of the vessel.

Under the civil right the basis of emigration is an agreement, in which the mutual services and liabilities both of the ship-owner and the emigrant are defined, such as charges for passage, manner of lodging, embarkment, landing, board during passage, obedience to shipping regulations, reimbursement or forfeit of passage fare, extent of admissible luggage, &c.

It lies in the nature of things that the contracting parties do not stand on the footing of equality.

Therefore the state has to regulate the contents of the emigration contracts, so that the ship-owner, by abusing his technical superiority, cannot liberate himself from a responsibility incumbent naturally upon him.

The minimum of his liabilities towards the emigrant is therefore regulated by law to the exclusion of all private agreements contravening. Upon the emigration police the following duties are enjoined: Emigration agencies are to be controlled, to prevent fraudulent enticements and fleecing of inexperienced persons; further, the treatment of emigrants at the ports of embarkment and when on board, where moral interests, in a sexual respect, apart from hygiene, shall be taken care of.

Under the German penal code illicit emigration of persons of an age liable to military service shall be cognizable by a fine of from 150 to 3,000 marks, and by confiscation of their property for the payment of such fine, especially in cases where the highest amount of fine has been imposed; while a minute-man (*Reservist*) on leave of absence (*Beurlaubt*), or *Landwehrmann* (man of second levy), who emigrates without the permission and knowledge of his superior military authorities, shall be fined a sum of not exceeding 150 marks.

Desertion, of course, is punished as such according to the provisions of severe martial law.

EMIGRATION AGENTS.

As above stated, the supervision over and legislation on emigration matters is one of the prerogatives of the Empire; thus, in 1874, an imperial commissioner of emigration (to take his official residence at Hamburg) was appointed. On his activity he has to submit a report to the Imperial chancellor. He confines his statements mostly to questions of board, lodging, treatment of emigrants, condition of vessels, improper practices of agents, &c.

In addition to the supervisory powers of the Empire, many laws of the several German states continue to remain applicable. Their chief principles are stated to be as follows:

(1) Persons to engage in the acquisition and transportation of emigrants shall be bound to obtain first a license as such from their respective Governments, and to deposit bonds to warrant faithful fulfillment of all their liabilities to state and emigrants.

(2) Keeping of books as prescribed by law, subject to the inspection of the authorities.

(3) A series of special quantities for a faithful performance of the contract, which has to contain certain articles prescribed by law; for instance, that each party interested has to receive an exemplified copy of such contract, liability of the agent and his principal for accidents during the passage (delay, naufrage), and a corresponding security by special bond or insurance.

(4) Taking care of good and suitable condition and equipment (spaciousness, sufficient and good supply of provisions) of emigrant vessels.

In summing up this part of my report I wish to state that nobody is prevented from emigrating who has freed himself, in the legal form, of all his liabilities to the Empire, state, and private persons.

EMIGRATION TO THE UNITED STATES NOT LIKED.

Complaints are raised that the stream of emigrants was not in proper times systematically directed to countries where they could have remained Germans and have become consumers and not producers of German commodities.

The colonial policy adopted in recent time is therefore intended to make up for the alleged loss hitherto sustained. As a rule, leading German circles are no longer in favor of Germans emigrating to the United States and Canada. To what extent and by what influences emigration, as appears from inclosure A, in the last five years (and in each of these years more) was checked can hardly be stated. In 1885 the number of emigrants was 103,642, as against 210,547 in 1881.

In my last annual report I said:

> This considerable decrease in 1885 seems to show that either the economical condition of Germany has improved, and that the attractive power of America, which heretofore took the largest portion of emigrants, has diminished, or that the new colonial policy of Bismarck keeps many on the fence.

This still proves true. Since then a new measure was adopted by the Prussian Government relating to colonization at home.

The eastern provinces of Prussia and Posen, especially in districts where there is a mixed population (Polish and German), showed not only the highest number of emigrants and thinnest population, but also the lowest degree of industry and worst condition of farming, though they have a more fertile soil than many other provinces. The circumstances that the percentage of Germans, as compared with Poles, diminished constantly attracted the attention of the authorities, and it was finally found that the impossibility of many sons of German farmers, &c., considering the many large manorial estates, to get an independent husbandry and homestead, drove many valuable elements away, leaving behind a not desirable class of people.

Now, recently Prussian legislative bodies have passed a law appropriating 100,000,000 marks for a colonization of those provinces by Germans. Large manorial estates shall be purchased and dismembered to be prepared for husbandries of fit and able small farmers to carry on a systematic and paying farming.

STRIKES.

It could hardly be asserted that strikes lead to emigration, since the very best and most needed classes of artisans, for instance those engaged in the building trade, have been making efforts to raise their wages still farther by means of strikes, while the least paid are those working classes who can easily be substituted by others. Those belonging to the former classes require a more robust constitution, and are not so numerous as the latter. So their larger number causes a greater competition for work in certain branches, resulting in lowering wages so much needed for the most indispensable necessaries of life. Thus the latter have no means to emigrate.

Several strikes have this year taken place in Berlin, but they turned out only to a very inconsiderable extent in favor of the strikers.

Regarding the result of the strike of the journeymen masons in Berlin the organ of the German builders (*Baugewerbe-Zeitung*) says:

> Their strike is at an end, and it has not had the desired effect of establishing the minimum wages of 50 pfennigs (11.9 cents) per hour. In fact no minimum wages were established at all, but journeymen received pay according to their ability. At present about 5 per cent. receive less than 45 pfennigs (10.7 cents), per hour, 45 per cent. receive 45 pfennigs (10.7 cents), 45 per cent. 50 pfennigs (11.9 cents), and about 5 per cent. more than 50 pfennigs (11.9 cents) per hour.
>
> The strike was ineffective; there were always plenty of journeymen masons ready to go to work on the buildings where the striking workmen had quit and these newly employed journeymen received the protection of the police; consequently the strike was in every case of short duration.
>
> It has also been established without a doubt that the large majority of journeymen masons in Berlin care little for the continuation of strikes or prolongation of useless agitation. The journeymen have frequently expressed themselves as thoroughly contented with the energetic measures of the police which enables them to work undisturbed and to exercise their own inclinations.

EFFECTS OF EMIGRATION ON GERMANY.

Herzog, speaking on this subject, says:

> No doubt exists that Germany thereby sustains a heavy loss of population.

Another author, Scherzer, estimates the total emigration as follows:

	Persons.
1821–'30	8,000
1831–'40	177,000
1841–'50	485,000
1851–'60	1,130,000
1861–'70	970,000
Total, 1821–'70	2,770,000
According to official returns:	
1871–'80	595,151
1881–'85	817,778
Total, 1821–'85	4,182,929+63,183 via Havre.

Herzog goes on to say:

> During the last four years (1879–'83) alone Germany gave off more emigrants to the United States than the number of her whole army on the peace footing amounts to; the majority was of an age which is regarded as the one of the highest working power, and recruited out of those classes of people, which especially are called the working classes, since by their activity in farming and trades such goods are produced as constitute the broad groundwork of national welfare. Their absence is sensibly felt in the lack of hands in connection with remarkable rise of agricultural wages, especially in those districts where farming is the principal source of income, and it is here where at the time of harvesting it conduces to inconveniences which are very onerous as long as it cannot be afforded to have machines take the place of hands.

I am informed that it has become customary in Germany during the recent years to give soldiers in actual service leave of absence to assist such farmers as make application for help during harvest.

As for the favorable effects, Herzog says further:

> They are best illustratod by the simile of a too-densely grown wheat-field or forest preservation, in which, by removing part of plants, room and light are created for the remainder. If we bear in mind that the 4,000,000 who since 1820 left Germany for the United States should have remained in the "Fatherland," and been fertile and increased in number, the German Empire would have at present most probably a large number of population than the United States, but it would nevertheless be probable that the majority would have to conduct a mode of living under worse conditions than they are at present. If this favorable effect of emigration can but with difficulty be ascertained in detail, another advantage can easily be recognized, namely, the one which a permanent connection of the emigrants with the former home brings on for commerce and industry. This connection is stronger and more durable than generally supposed. Even if the emigrant renounces his nationality; nay, even if he loses the use of his mother tongue, the economical relations continue to subsist with great tenacity. The considerable extent of the German exports to the United States, Brazil, and Chili is in the main caused by the larger number of German immigrants.
>
> Knowledge of the locality where to buy goods, national customs and habits, and a predilection for their old home contributes to decide would-be purchasers in favor of the old native country. The ways once being opened to commerce the relations between the two countries are easily maintained and strengthened.

GERMAN EMIGRATION TO SOUTH AMERICA DESIRED AND FOSTERED.

Great efforts have of late been made by German colonial and other associations to give the stream of German emigrants another direction than to the United States, where they say German nationality and language is easily lost in the intercourse with a kindred tribe and idiom. Great hopes are therefore entertained with regard to the three southern states, Brazil, Uruguay, and Paraguay, having vast fertile districts with a population next to nothing, situated under a temperately warm sun. The opinions of scientific explorers and practical men have confirmed that from the nature of agricultural produce obtained there, these states, as well as Argentine, would not, like North America, serve to make German immigrants formidable competitors in the production of breadstuffs, while, by and by, they would become valuable customers for German manufactures.

It is also claimed that the natives of South Brazil, with their idiom, their manners, and customs are more foreign to German immigrants than the United States, retarding amalgamation with the native element. To prove this, attention is directed to the development of three Brazilian provinces, Rio Grande do Sul, Parana, and Santa Catharina. About 200,000 Germans have settled here, steadily increasing in number, both by births and new immigrants from Germany, but retaining their German language and manners in church and school.

GERMAN COLONIES.

German colonies have as yet, except perhaps the acquisitions in the South Sea (New Guinea, &c.), not been deemed proper fields for German farmers; but as purveyors of raw material and colonial and such goods as are not produced in Germany, they are likely to prove before long an important factor in extending German trade, and in giving employment to many thousands of persons in the lines of navigation, commerce, and industry.

CONDITION AT HOME.

The general condition of the German people at home, especially in reference to those classes which contribute largely to the number of emigrants, viz, farmers, agricultural laborers, and artisans, I shall attempt to state, and, in addition to the information above given, some other features.

The decline of German farming is a subject much discussed in Germany.

For a better understanding of the mode of farming, it may be well to say that German agriculturists make a distinction between large landed estates with net proceeds of at least 1,500 marks per year, consuming only the smallest portion of their produce.

Mittelgüter (landed estates of about 50 to 100 hectares) of arable land under cultivation, with net proceeds of at least 300 marks. Small estates, with 5 to 20 hectares, where the keeping of a plow can still be afforded, with lowest net proceeds of 90 marks, and dwarf (truck) farms (*Zwergwirthschaften*, spade husbandries), where the plow is replaced by the spade, or the work is done with the help of hired teams.

Compound estates (*Gütergemenge*) where a whole tract of land, under the superintendence of an official surveyor, was subdivided into a number of triangles, the owners or farmers of which constitute the inhabitants of a village. The term *Gütergemenge* is used in contradistinction to the old German *Hofwirthschaft* (domain husbandry), where the estate forms a whole, in the center of which the husbandman resides, as it is still the case in Schleswig, Oldenburg, East Frisia, and Westphalia.

Large husbandries, surrounded by smaller and spade husbandries, exercise a beneficial influence upon the whole developement of culture of the surrounding population by their perfecting the cattle-breeding; by the introduction of better and newer modes of cultivation; by the storage of supplies, and, in many cases, by grand industrial trades connected therewith (manufacture of spirits, sugar, starch, &c.), and by furnishing to manufacturers and cities large quantities of superfluous products and raw materials.

In times of failure and death their usefulness is quite obvious. An agriculturist (Poussanie) says:

> With all the greater well-governed nations of an old civilization, a gradation of husbandries from the smallest tract of land up to the large estate should exist everywhere, so that every individual should have a chance of improvement. For with maxims of an old civilization, a high degree of individual and general progress can exist only when they develop their forces harmonically, *i. e.*, if they have fostered agriculture, industry, and commerce in reasonable proportion, or, in other words, if they have realized a subdivision of labor in the most perfect manner.

THRIFT OF HUSBANDRY.

Considering the heavy pressure which, according to the same expert, for centuries, except in Northern and Eastern Prussia, weighed upon agricultural laborers, and the present progress of transformation of all political, social, and economic conditions of Germany, a reasonable and paying husbandry at times, when on the most estates expenses have been in excess of revenues, could be carried on only where land owners succeeded in securing, or rather settling on or near their farms, a sufficient number of good and industrious laborers, and where in a truly humane manner they took care both of the physical and moral welfare of their employés.

As means to settle firmly agricultural laborers are proposed: To help them to acquire their own dwelling, to get free tenancy of good arable land, cheap fuel; in case of sickness, medical treatment free of charge; sickness-funds; further life insurance, and insurance of chattels against fire should be provided for them.

As already stated, the Reichstag has this year passed the bill to extend the benefits of the so-called *Unfallversicherungs-Gesetz* (insurance in case of accident) to agricultural and forest laborers. In other respects the ideas above suggested have already found application on some of the larger estates.

KIND OF INCOME OF AGRICULTURAL LABORERS, ETC.

In Germany there are three classes of them: Free day laborers, receiving mostly wages in money, and partly conducting a migratory life according to season and place of employment found, while servants and contract day laborers receive compensation in land let out, produce, and in money. They are engaged per year or even for a longer period. Contract day laborers are mostly found on large manorial estates.

Household budgets and rates of wages of such day laborers are published in the report of my predecessor, Mr. Brewer (see pages 210 and 211, Vol. I, Europe Labor Report, 1884). Wages have hardly much changed since then.

The material condition of these laborers is stated to have much improved as compared with a state of things twenty or thirty years ago. The prices of so-called colonial goods (sugar, coffee, spice), and especially of clothing material, have not risen in the same proportion as wages.

Most of these laborers either produce themselves or receive wages in produce, namely, breadstuffs, potatoes, milk, meat, fuel, and dwelling.

Laborers owning land have generally houses of their own. On their land they cultivate potatoes, vegetables; produce in their own husbandry milk, meat (especially pork), eggs, &c. They mostly bring up more hogs, fed by the waste produce, than they want for their own consumption. When fat, the hog is sold in the next market, and out of the money of sale they increase their live stock. It was especially in their favor that higher duties on imported meat and lard were introduced by the German Government. The present price of pork is 50 to 70 pfennigs per 1 pound (½ kilogram) in Berlin (against 55 and 75 pfennigs in 1876), and for lard at present 33 pfennigs against 80 pfennigs in 1876.

With all the laborers, also with those who hired only a tract of land, the wages in money serve materially to cover such necessaries of life where a rise of price took place only in an insignificant manner.

The condition of dwellings, especially on the manorial estates of Northern Germany, has much improved.

As for morals, complaints are often raised of the laborers becoming less economical and more pretentious. Others have noticed in some districts a greater propensity for spirituous liquors; in Posen, Prussia, and Silesia, for brandies; in Southern Germany, for beer. In some counties, neighboring large cities, a spirit of opposition and discontent is noticed, mostly inspired by socialistic doctrines.

Mental education is stated to be improving. The number of persons not able to read or write is of very small percentage. Of 151,180 recruits lifted in 1884, 1,923 or 1.27 per cent. were unable to read or to sign their names. This result is due to the compulsory school education law.

CONDITION OF INDUSTRIAL LABORERS.

The recent riots and labor disturbances in England, Italy, France, America, and particularly in Belgium, have again directed the attention to the socialistic problem still waiting for a solution satisfactory to all parties concerned.

It has not escaped my attention that in Germany the socialistic agitation has been comparatively of a quiet character. This may be due partly to a more discreet leadership, partly to the vigilance of a strong Government, partly to a regular employment, and finally to certain protective measures inaugurated for the benefit of the workmen. In 1883 an act was passed providing for the insurance of working men in case of sickness. Another act was passed in 1884 to insure in case of accidents industrial workmen (about 4,000,000 in number); this latter act has this year been extended to agricultural and forest laborers (about 14,000,000 in number), while another act was passed for indemnification of officials of the Empire in cases of accident. Besides this, a bill to protect all working men in old age is under contemplation.

If true causes of just grievances of laborers and practical means could be found to remedy all evils resulting therefrom it would be an easy task to remove the effects. In many, if not in most of cases, it is the permanent agitation of the socialistic leaders who make a living on the small contributions paid by the numerous members of the Laborers' Union organized by them. But under the act against dangerous pursuits of social democracy the German Government proceeds energetically against the instigators, expelling them from places where, as in Berlin, Leipzig, Hamburg, and recently in Spremberg, the state of small siege has been proclaimed. But several points of their complaint deserve, at any rate, our attention. One author, Schippel, speaking on this subject, says:

> A surplus of goods of all kinds beside a surplus of privations—that is the signature of the present time; placed amidst an exuberant plenty of goods, the people long with sorrow for daily bread.

Everywhere productivity or susceptibility of production has grown beyond the increase of population. Our forefathers would have thought it impossible that overproduction, even of breadstuffs, could ever assume such an extent on the whole globe.

Another author, Professor Reuleaux, the well-renowned author of "Kynematik," in a very interesting treatise on the "Machine and the Social Question," points to very noticeable features of the question, some of which are herewith rendered in translation.

He goes on to state that the fact that industry steadily creates a surplus of manufactures is but natural.

The labor question owes its existence to the extraordinary amount of work that can be done by machine with a comparatively very slight consumption of human force.

House or home industry distributed over a country disappears, and concentration of labor, with all tools belonging thereto, ensues on certain places, accumulating masses of people in a condition gradually merging into pauperism, with all its physical and moral evils. The overwhelming effect of a machine manifests itself in absorbing the small artisan or mechanic, who, in the immediate neighborhood of his family, did until then his daily work. And this process of absorption directs naturally itself towards the more skillful men. He who is less clever and strong remains until he also himself is devoured by the factory, be it in any occupation and at any rate of wages whatsoever.

In large cities, like Berlin, the lack of clever artisans is already perceptibly felt; but what strikes even more attention is a deplorable diminution of the skill itself of the operatives. Nearly every new invention tries to deprive the remainder of work from laborers still done by hand. Not only are adult workingmen lowered to a position of mere machine helpers, but even this very position is uncertain, as the same could be easily filled by children. This serves, again, to press down wages to a level hardly sufficient to live on.

And while the machine requires the laborer's full and close attention, he has no occasion to apply and exercise his natural gifts in producing works, nor can he, under such circumstances, train and strengthen his physical, intellectual, and moral powers. It is but an act of grace if employers allow him at times to change the kind of service or of the machine to be attended by him.

Reuleaux says:

> The two great organizations for horizontal transportation of goods, steam navigation and railroading, exhibit applications of the steam engine which do not entail a suite of detriment to the laborers concerned; both institutions have rendered to society the very greatest services. The bridging of the seas by steamboats, the connection of countries by railroads, the speed of movement taking place on both ways, have entirely transformed the life of nations.
>
> To these institutions of transportation serves a very considerable fraction of the laboring classes, and that under circumstances which, in the principle, are not oppressive, not degrading, not detrimental to health; on the contrary, as a rule, are very favorable. Here there is no labor question, or, if same has been forcibly created, does not possess a like dark background of the condition of workingmen as in other branches.
>
> Like favorable, but at least not unfavorable conditions are found in the line of large machine works, there where locomotive engines, steam engines, railroad cars, ship machines, boilers, vessels, &c., are built. Here, on an average, the workman has a wholesome, though toilsome, not too monotonous and paying employment in the service of the steam engine. The good with which many German manufacturers and managers have come to meet any reasonable wants of their laborers, have been attended with blissful results.
>
> It would now be the task of mechanicians to accede to the question, whether and in what manner, in the province of machinery, could be contributed to a cure of evils which machinery has inflicted upon society additionally to its good gifts.
>
> During the last decennial that kind of working machines and whole trains of such machines have been taken into use, which bring, so to say, the working of an article to be made to a complete and full finish, in which the work of regulation for the most part is no longer done by human hand. The consequence thereof is that for the production of an article of a very high quality only an inferior workingman is required.

On the occasion of the Paris International Exhibition, Professor Reuleaux called attention to this kind of production, calling articles exclusively made by machines, "machinofactures," in contradistinction from "manufactures," *i. e.*, articles made or finished by hand, or where skill of the laborers in treating and using machines is still wanted to a great extent. Then Professor Reuleaux goes on to show that especially there where "machinofactures" are produced, it can be noticed how the laborer is gradually surrendered to capital.

> A steam engine acts so much the more favorably, *i. e.*, more economically, as it is larger.
>
> The same has, therefore, a natural tendency of increasing in bulk and efficiency. An industry furnishing a simple product, such as calico, must therefore, of necessity, fall to the capital, as this alone is able to establish those grand plants and works, the operation of which admits of producing an article cheap enough to be salable in the market. It may be granted that the extent of cotton and woolen mills at present may have reached nearly *that* limit where control, supervision, and management still remain possible; but around these limits capital is the absolute ruler.

This latter has thereby been enabled to destroy the wealth or welfare of entire territories, or to concentrate a whole industry exclusively in certain places. It is remarkable that in the domain of weaving or of fibrous stuffs industry generally, the forcible means of strikes was of no good whatever to the strikers. He says:

> If we, however, look somewhat more closely at this very question of weaving, we observe that not so much the tool, the loom procurable at lower rates, as the purveyor of force, the steam engine, afforded the preponderance to the capital. Only this latter is able to procure and to run those huge and powerful steam engines of our days, around which the remainder of the establishment or plant, though also wanting capital, is grouped, though not in such a manner that these appendices could not be detached or separated therefrom. From this very cause the weaving trade, though under hunger and sorrow, has succeeded for so long a time to stand the force of the steam engine.
>
> Here we stand evidently in the face of a principle.
>
> The working machine is, in a great many instances, not a dynamical unit, but divisible finds application in one and the same works in many equipollent repetitions, only loosely kept together by the steam engine.
>
> The single working machines have no exorbitant price; on the contrary, the "machinofacture" of machine builders is about to furnish same in an increasing perfection cheaper and cheaper.
>
> Therefore, in cases where these conditions meet, there is a chance to militate against the undesirable preponderance of the capital that is to make force independent of capital.
>
> The small weaver would be saved from the overpressure of capital if we could give him that portion of elementary working power necessary for his loom. Similar attempts could be made with regard to spinners, but much more to the trades of joiners, locksmiths, tinsmiths, brush-makers, pump-makers, and the like.
>
> What these trades want is partly power, partly working machines; but these latter could, even now, be procured by the artisan, as they can be had at really cheap prices, but what he wants is motive power for work at home.
>
> Then they could do their work at home just as well as in the factory, which attracted them, and in utilizing his train of machines in various ways he would retain or regain his skill. Able to compete, the small master would be, in spite of certain advantage which large manufacturers have, for the reason that when working at his home the mutual assistance of the members of his family in general, the moral element, will be added to his well-being as a most efficient factor.
>
> Thus the small manufacturer, with his assistants and apprentices around him, would form a closed working organism, with superior and subordinate forces, resembling the former mode of living of mechanics or artisans. And had all these small manufacturers once become able to compete their quality would quickly improve, as in the same moment also the market for laborers wanted for large manufacturers, *i. e.*, for the capital, would experience an improvement.
>
> The capital would thereby lose the attraction to proceed to manufacture articles which can be easily supplied by small workshops.
>
> Thus the tendency of the capital to concentration could be neutralized.
>
> What engineers and machine works have to do to remedy an essential part of social evils, is the production of cheap, slight working power, or, in other words, small power machines to be operated at small expense.

Several excellent types of such machines can already be found—gas-power machines, hot-air machines, small water-pressure machines, petroleum-gas machines, &c.

Several days ago, one Julius Spiel, Berlin, appeared at this office, in a patent matter for petroleum and gas machines of that kind. He informed me that a large company is constituting to manufacture that type of machine.

Professor Reuleaux's views, above given in substance, remarkably agree with a portion of a lecture delivered by I. C. Bayles, as president of the American Institute of Mining Engineers, at the meeting of Halifax, N. S., September, 1885, where he says:

> It is interesting to note in passing that in the city of New York French mechanics are building up an industrial system very different from anything previously known in this country. There are many hundreds of French artisans quietly working in shops of their own, using small steam powers and light machinery for the manufacture of specialties, in the production of which the great manufacturing establishments have not thus far been able to compete. These men live and work under one roof, and have their shops in all unexspected places. They manufacture art works of various kinds by electro-metallurgical processes, small art objects for ornamental purposes, passe-

partouts, and other light picture frames, and fine confectionery. These men earn more money and live better than they possibly could as wage-earners in the large manufacturing establishments of the city.

HAND WEAVING *versus* MACHINE WEAVING.

A noteworthy gathering of weavers took place November 1 in the city of Elberfeld. The deplorable state of poverty among the hand weavers, as well on the Lower Rhine as in the valley of the Wüpper, is well known. The introduction of machine weaving has greatly damaged the once thriving business of hand weaving, even to such an extent that the Prussian Government has taken the matter into consideration.

The object of this meeting of the weavers was to take measures which may improve this sad state of affairs.

It was resolved to send a petition to the Reichstag with the following demands:

(1) A taxation to be placed on machine-weaving under international treaties.

(2) Limitation of the same through the fixing of a maximum time for such a day.

(3) Abolition of married women labor, and prohibition of labor by children under sixteen years.

(4) Abolition of prison labor and convict labor competition.

It is a notable fact that Mr. Gebhard, a manufacturer and counselor of commerce, representing the Elberfeld Board of Trade, accepted the demands of the weavers, provided they can be made an international regulation.

WAGES.

I am informed that, as a rule, wages have in recent years nearly kept on the same level. Efforts were made by laborers of the building trade, as hereafter will be more fully described, but with doubtful results. I inclose a comparative statement showing the average rates per week paid in Berlin during the years 1882, 1884, 1885, as far as a comparison was practical.

No change has certainly been noticed with regard to unskilled day laborers in Prussia and the Hanseatic cities. I inclose a table showing their daily wages received at different cities, giving the average wages both for adult and young, male and female persons. These statistics are taken from the *Concordia*, published at Mayence, and are stated to be based on official publications.

Able men do not lack employment, and, as already stated in my last annual report, their mode of living has not been worse; on the contrary, the prices of provisions have since again shown a decline.

A NORMAL BUDGET OF A BERLIN LABORER.

According to a computation recently prepared by a social association of Berlin, a workman's family, consisting of husband, wife, and two children, keeping up quite a simple mode of living, and confining themselves to the very greatest necessaries of life, paid per year for provisions 51.9 marks ($123.52); rent, tax, and fuel, 27.7 marks ($65.92); clothing, shoes, and underclothing, 304 marks ($72.35); total, 1,100 marks ($261.82).

Expenses for medical treatment in case of sickness have not been taken into consideration. Taking the average income of a Berlin unskilled laborer (see Exhibit E) at 2.40 marks (37 cents) for about three hundred working days, which is not always the case, this would make about 720 marks ($171.36); hence a falling short of 380 marks ($90.46), which must mostly be made up by the earnings of the wife, and, if age permits, of children.

For more example, I beg leave to refer to Report No. 110, dated May 25, 1884, of Mr. Brewer, my predecessor, where Berlin household budgets of different kinds of working people have been reported. No striking change in the mode of living has since been noticed.

In a report of the Prussian superintendent over factories at Dusseldorf I found another statement, which I herewith inclose, as to the weekly consumption of a workman's family during winter. He accompanies same with some observations. He says:

> If we take into consideration that an operative engaged in coarse works wants for his own person per year at least 3 blouses, each 42 to 47 cents; 3 pairs of trousers, at 71.4 cents, $2.33; 8 to 10 pairs of stockings, at 23.8 cents, $1.90 to $2.38; 3 to 4 pairs of wooden shoes (sabots), at 14 cents, 42 to 56 cents; 1 or 2 pairs of leather shoes, at $2.38 to $7.14; add to these items expenses for taxes, school moneys, school books and the like; 50 pfennigs per week for yarn, &c., for repair; 6 marks per year for fresh bed-straw, it is obvious that a laborer with a large family, living at a larger place, earning on an average 3.50 marks (83 cents) a day, is unable to incur the expenses set forth in the annexed table, but has considerably to reduce them.
>
> He further reports that in many cases operatives in a certain city stated to him that a family of five members, earning wages of about 3.25 marks (77.3 cents) per day, could hardly make both ends meet, but when earning only 3 marks (71.4 cents) this would be impossible without serious privations.
>
> In the country, especially if other favorable conditions permit that a little land is rented and a goat kept, it can be more easily afforded to get tolerably well along with 3 marks of daily wages. But even in this case the limit where privations begin lies far beyond the rate of 2 marks (47.6 cents) a day. I give here two examples:
>
> A locksmith, having a very economical wife, another member of the family earning wages, and five members not yet wage-earners, earned 682 marks ($162) per year.
>
> "Nobody," he declared, "had to suffer hunger, but at times we were short of means for support."
>
> A silk-weaver, whose family consisted, beside himself, of wife and three little children, earned, on an average, about 14.30 marks ($3.40) a week, stated that since his marriage, seven years ago, he has not been able to buy a coat; and though his wife understands housekeeping better than the majority of workmen's wives, he does not get rid of his debts for mere bread.
>
> Of a more considerable influence than usually thought upon the laborers making both ends to meet, is the reliableness, regularity, and promptitude of the wages received.
>
> A workman, formerly earning an average day's wage of 3.25 marks ($1.73), could not get free of debts and satisfy promptly the wants of his family, because of the considerable fluctuations in day's wages; their payments were made every fortnight, while a week's pay was retained, but can now do so very well, having become invalid, and as such deriving his revenue every quarter, earning something besides, the whole income amounting only to 2.85 marks (67.8 cents).
>
> Another report of a superintendent over the manufacturing districts in the province of Brandenburg (Berlin excepted) says as follows:
>
> "Movements for higher wages, called forth by similar movements in Berlin, showed nowhere a permanent result, so that the rate of wages during the last two years has remained on the same scale. But it seems that, considering the efficiency of our industries to compete, wages have obtained, for the present at least, their highest mark. Best wages received:

Occupation.	Wages per week.	Equivalent in United States currency.
	Marks.	
Foremen in metal works (founders, rollers, wire and pipe drawers, turners)	29 to 30	$6 90 to $7 14
Their first assistants	18 to 24	4 28 to 5 71
Foremen in the machine and wood industry	18 to 20	4 28 to 4 76
Cloth and optical industries and stone cutters	16 to 18	3 80 to 4 28
Ship-builders	15 to 16	3 57 to 3 80
Carpenters, brick-makers, cigar-makers	12 to 15	2 85 to 3 57
Masons, locksmiths, blacksmiths, tailors, saddlers, rope-makers	10 to 12	2 38 to 2 85
Shoemakers	9 to 10	2 14 to 2 38

THE DEMANDS OF SOCIAL DEMOCRATIC LABORERS.

In a meeting of unemployed workmen in Berlin, on the 25th of January last, which was attended by about one thousand persons, it was greatly deplored that so many people in Berlin were without work, and that their number was constantly increasing. One of the speakers, Goerchi, a leader of Social Democrats, said some "bourgeois" claimed that the lack of employment was caused by "overproduction." "This word 'overproduction,'" he said, "was an invention of those same bourgeois. The lack of employment," said he, "was caused chiefly by the inability of the people to buy, and this was caused by a production at the mercy of capitalists." The natural consequences of such production must of necessity bring about an ever-recurring crisis and cause perpetual poverty among the masses of workingmen. The tendency of present production is to cheapen all articles of manufacture, and still the people are for the most part unable to buy the absolute necessaries of life. The reduction in the price of manufactures was brought about by reduction of the workingmen's pay. The reduction in the pay for work brought cheap female labor into prominence, to the detriment of male labor.

Female labor was the principal cause of the present lack of employment. For the sake of morality, household regularity, &c., female labor in factories should be prohibited or at least restricted, &c.

Female labor at night is employed in glass-works, mirror factories, in works manufacturing coal-dust, bricks, cement, cast iron, and zinc, porcelain knobs, paper, pasteboard, in wood-grinding, spinning and weaving mills, cloth, flannel works, in worsted spinning, net-work factories, chemical works, sugar refineries, starch works, newspaper press-rooms.

In these branches of industry, where day and night labor is carried on during the whole year, the number of females who work at night is about as follows in the different German states:

German states.	No. of establishments.	No. female employés.
Prussia	191	3,161
Bavaria	6	171
Würtemburg	2	80
Baden	2	40
Brunswick	2	9
Saxe-Meiningen	2	120
Lippe-Detmold	5	51
Saxe-Altenburg	1	20
Bremen	2	8
Hamburg	2	4
Alsace-Lorraine	6	376
Total	222	4,080

In branches of industries where only during a certain time of the year (campaign) business is carried on, but in this case regularly at day and night, the number of females employed (in works manufacturing beet-sugar, sauerkraut, bricks and tiles, earthenware) were as follows:

In sugar works.

States.	No. of establishments.	No. female employés.
Prussia	236	6,500
Bavaria	1	18
Baden	1	50
Mecklenburg-Schwerin	3	20
Saxe-Weimar	3	54
Brunswick	30	450
Saxe-Meiningen	1	10
Saxe-Coburg-Gotha	1	24
Anhalt	28	620
Schwarzburg-Sondershausen	1	28
Schwarzburg-Rudolstadt	1	22
Total	306	7,796

In the following branches of industries female labor is employed at night only in regularly recurring times (season work), while during the remaining part of the year only day work is done: Works manufacturing articles of lead, wood, carving material, carpets, hosiery, umbrellas, toys, in dyeing works, cloth-refining and finishing works, works making ginger-bread, preserves, and pickled meats. There are in Prussia eleven works, employing 515 females; in Reuss Gere three works, employing 200 females.

In the textile and paper industries females work only at night at specially urgent business times.

INSTRUCTION OF FACTORY GIRLS IN MANUAL LABOR, ETC.

Even Duceptians and Leplay denoted ignorance of the wives of workingmen regarding all kind of manual labor and household work as the principal cause of the poverty, misery, and moral depravity which unfortunately is so prevalent among the laboring families. And since the time when these great political economists first called the attention of an enlightened public to this deplorable state of affairs, matters have not improved. It is comparatively rare to find the wife of a workingman able to cook, sew, knit, and mend torn garments, or to do such work as is of vast importance for the welfare of the poorer classes. The consequence is that the laborer who returns from his daily work finds, instead of a palatable meal, some kind of mixture which it is hardly to be expected he will relish.

A further consequence is that instead of cleanliness and order in their dwellings, filth and disorder reign, which create a distaste in the laborer for his home, and he prefers to spend his evenings in taverns and drinking-places.

A remedy against such evils can only be expected when factory girls are given a chance to acquire the knowledge through the necessary instruction in housekeeping, &c., before their marriage. Such training cannot be given during their school term, but when they commence to work in factories.

Of late such trials have been made in Baden. Under the protection of the Grand Duchess, an institution has been opened in a small town where young girls may acquire a knowledge of their future duties as wives and mothers. Instructions are given during evenings, so that those who work in factories need not neglect their daily occupation.

Similar establishments have been opened at Worms, in Hanover, and Westphalia.

But success will be possible if they become general. It is not necessary that each employer establish such a school; it would be an easy matter if several employers create them jointly.

It lies in the line of temperance societies to suggest and support these institutions, and ladies' societies will sympathize with their introduction. This opens a vast field for the charity of high-standing ladies.

A well-known political economist is of opinion that the wives of employers can have the greatest influence in elevating the female working-class. The instruction of girls in manual labor and other work of housekeeping would improve also the moral character of inexperienced girls who are at the mercy of so many temptations. But the bliss of such schools would be universal.

BERLIN JOURNEYMEN BUILDERS' FIGHT FOR HIGHER WAGES.

On the 3d of May last a long-threatened strike commenced. On the 9th of May a meeting of at least 4,000 journeymen took place, in which it was resolved that since 161 employers had conceded to their demand of 50 pfennigs (12 cents) per hour, the strike should not be general.

Married journeymen who are at work agreed to pay 1 mark per week and unmarried men 1 mark 50 pfennigs to the strike funds. A resolution that unmarried journeymen who came to Berlin from other cities should leave the city while on a strike was not adopted.

On the other hand, the Berlin Union of Master Builders held on the 5th of May a meeting and adopted a resolution, the substance of which is as follows:

> The masters being convinced that strikes, even if they result in favor of one party or the other, are injurious to both parties, have since the beginning of the year done everything in their power to avert them. They could not enter into any negotiations with the so-called commissioners of wages, because, in the first place, this committee was elected by a comparatively small number of the journeymen at work in Berlin; secondly, because this committee will not permit any contract work whatever; thirdly, because all decisions of the committee are to be approved by the entire number of journeymen, which is utterly impossible; and, lastly, because this committee is influenced to a great extent by persons who are not journeymen nor in any way connected with the leading trades.

To bring about harmony among masters and journeymen, the former deemed it expedient to organize a body of masters and journeymen to consult and arbitrate jointly regarding wages, the number of working hours per day, and all matters of their mutual interest and welfare, &c. This manifesto was adopted unanimously and printed in 15,000 copies to be distributed among the journeymen masons of Berlin. It was further adopted to allow 45 pfennigs (10.7 cents) per hour as wages, which can be increased to 50 pfennigs (12 cents) if the work done should merit such an increase; but that 10 hours should under all circumstances constitute a day's work.

As already stated, the masters carried off the victory in the meaning of the above resolutions.

PROTECTIVE MEASURES IN THE INTEREST OF WORKMEN.

This question came up in the Reichstag. At the motion of the Social Democratic members of the Reichstag, a bill prepared by them, and recently submitted to the Reichstag, should be passed by the same, a committee was appointed to prepare the question.

Their first report has recently been made. The same deals exclusively with the first point of said bill, viz, the organization of a board intrusted with the supervision over the execution of protective laws for workingmen; such board should officiate in the name of the Empire, under the title *Reichs-Arbeits-Amt* (work office of the Empire), which should have control over the 200,000 working offices to be created throughout the Empire.

According to the bill, as prepared by the Social Democrats, such "Imperial work office" should consist of an imperial council of labor, with the necessary assistants. Women should be eligible as such. But the imperial work office should have only the right to choose the members for the "Imperial labor council" and of the persons presented by so-called *Arbeitskammern* (chambers of laborers).

This chamber was the main object of the Social Democrats, which is to be a sort of "parliament of laborers." It is to have a voice in all questions appertaining to the politic-economical life of the district concerned, co-operating with the work office in the same district. It should be especially empowered to thoroughly investigate the operations of trade and maritime treaties, duties, taxes, wages, provisions, rentals, competition, schools, polytechnical institutions, collections of patterns and designs, condition of dwellings, hygienic matters, &c., of the laboring classes, &c.

The committee of the Reichstag, after careful deliberation, was of opinion that these propositions were impracticable, and so the same has concluded to substitute the following resolutions to be laid before the Reichstag for assent:

(*a*) To request the Imperial chancellor to use his influence towards increasing the number of factory inspectors and to decrease the extent of the present districts of factory inspectors for a more thorough supervision of factories.

(*b*) To request the chancellor to introduce a bill in the Reichstag providing for the obligatory introduction of "trade courts," suggesting that the judges of the same should be elected by an equal number of employers and laborers, in separate election bodies, by a secret ballot.

F. RAINE, *Consul-General.*

UNITED STATES CONSULATE-GENERAL, *Berlin, June* 19, 1886.

EXHIBIT A.—*German emigration via German ports and Belgian port of Antwerp during the years* 1871–1885.

Years.	Ports of departure.				
	German ports and Antwerp.	Bremen.	Hamburg.	Prussian ports, chiefly Stettin.	Antwerp.
1871	74,912	45,658	30,254	....	....
1872	120,650	66,919	57,015	....	1,116
1873	103,638	48,668	51,432	....	3,598
1874	45,112	17,907	24,093	1,536	1,576
1875	30,773	12,613	15,826	268	2,066
1876	28,368	10,972	12,706	202	4,488
1877	21,964	9,328	10,725	75	1,836
1878	24,217	11,329	11,827	85	976
1879	33,827	15,828	13,165	245	4,089
1880	106,190	51,627	42,787	552	11,224
1881	210,547	98,510	84,425	1,434	26,178
1882	193,869	96,116	71,164	1,936	24,653
1883	166,119	87,739	55,666	546	22,168
1884	143,586	75,776	49,985	750	17,075
1885	103,642	52,328	35,835	1,237	14,742

Exhibit A.—*German emigration via German ports, &c.*—Continued.

Years.	Destination.								
	United States.	British North America.	Mexico and Central America.	West Indies.	Brazil.	Other parts of America.	Africa.	Asia.	Australia and Polynesia.
1871	73, 816	9	21	37	920	263	18	11	817
1872	119, 780	690	38	61	3, 508	387	2	12	1, 172
1873	96, 641	49	32	28	5, 048	496	4	9	1, 331
1874	42, 492	138	24	83	1, 019	418	5	33	900
1875	27, 834	38	26	47	1, 387	377	1	37	1, 026
1876	22, 767	11	8	35	3, 432	804	54	31	1, 226
1877	18, 240	11	25	243	1, 069	289	750	31	1, 306
1878	20, 373	89	22	74	1, 048	449	394	50	1, 718
1879	80, 808	44	17	59	1, 630	441	23	31	274
1880	103, 115	222	19	100	2, 119	420	27	36	132
1881	206, 189	286	56	58	2, 102	762	314	35	745
1882	189, 373	383	65	39	1, 286	1, 101	335	40	1, 247
1883	159, 894	591	52	32	1, 583	1, 041	772	50	2, 104
1884	138, 339	728	39	20	1, 253	1, 276	230	35	666
1885	98, 628	692	39	24	1, 713	1, 576	294	72	604

Within 15 years, 1871–1885, of every 1,000 emigrants of the countries above named there went to United States, 955.0; British North America, 2.8; Mexico and Central America, 0.3; West Indies, 0.7; Brazil, 20.6; other ports of America, 7.1; Africa, 2.3; Asia, 0.4; Australia and Polynesia, 10.8.

Exhibit B.—*Population, marriages, births, deaths, &c., of the German Empire during the years* 1875–1884.

Years.	Average population of the German Empire.	Marriages concluded.	Births.	Deaths.	Excess of births over deaths.	Illegitimate children.	Still-born children.
1875	42, 510, 000	386, 746	1, 798, 591	1, 246, 572	552, 019	155, 573	74, 179
1876	43, 057, 000	366, 912	1, 831, 218	1, 207, 144	624, 074	158, 360	73, 517
1877	43, 608, 000	347, 810	1, 818, 550	1, 223, 692	594, 858	157, 369	71, 157
1878	44, 127, 000	340, 016	1, 785, 080	1, 228, 607	556, 473	154, 629	70, 647
1879	44, 639, 000	335, 113	1, 806, 741	1, 214, 643	592, 098	159, 821	70, 870
1880	45, 093, 000	337, 342	1, 764, 096	1, 241, 126	522, 970	158, 709	67, 921
1881	45, 393, 000	338, 909	1, 748, 686	1, 222, 928	525, 758	158, 454	66, 537
1882	45, 620, 000	350, 457	1, 769, 501	1, 244, 006	525, 495	164, 457	67, 153
1883	45, 862, 000	352, 999	1, 749, 874	1, 256, 177	493, 697	161, 294	66, 175
1884	46, 137, 000	362, 596	1, 793, 942	1, 271, 859	522, 083	170, 688	68, 359
Average	44, 605, 000	351, 890	1, 786, 628	1, 235, 675	550, 953	159, 935	69, 652

Exhibit C.—*Number of marriages, births, deaths, and illegitimate children per* 1,000 *inhabitants in the years* 1875–1884.

Years.	Marriages.	Births.	Deaths.	Excess of births over deaths.	Illegitimate children per 100 births.	Still-born children per 100 births.
1875	9. 10	42. 31	29. 32	12. 99	8. 65	4. 12
1876	8. 52	42. 53	28. 03	14. 50	8. 65	4. 01
1877	7. 98	41. 70	28. 06	13. 64	8. 65	3. 91
1878	7. 71	40. 55	27. 84	12. 61	8. 66	3. 96
1879	7. 51	40. 47	27. 21	13. 26	8. 85	3. 92
1880	7. 48	39. 12	27. 52	11. 60	9. 00	3. 85
1881	7. 47	38. 52	26. 94	11. 58	9. 06	3. 80
1882	7. 68	38. 79	27. 27	11. 52	9. 29	3. 80
1883	7. 70	38. 16	27. 39	10. 77	9. 22	3. 78
1884	7. 68	38. 88	27. 57	11. 31	9. 51	3. 81
Average	7. 80	40. 05	27. 70	12. 35	8. 95	3. 20

EXHIBIT D.—*Comparative statement showing the average rates of wages per week paid in Berlin during the years* 1882, 1884, 1885.

[Taken from publications of the statistical bureau of the city of Berlin. Denominations of occupation change every year, therefore comparison difficult.]

Occupation.	Average wages per week.			Average work-time per day.
	1882.	1884.	1885.	
				Hours.
Stone-cutters:				
Journeymen	$6 42	$5 42	$5 23 to 7 14	10
Journeymen in factories	7 14	6 42		
Marble-cutters	4 99	5 71	5 95	12
Marble-grinders	3 92	4 28	4 28	12
Marble-workmen	3 57	3 80	3 57	12
Mill-workers, laborers	....	4 28	....	12
Crockeryware	....	4 64	....	....
Turners	*4 76	*4 64	*4 76	13
Workmen	4 28	†47	4 28	13
Lads	*1 90	†23	2 14	13
Molders	....	5 71	....	13
Model-joiners	....	5 00	4 99	13
Firemen	....	5 85	5 43	13
Coachmen	....	3 82	3 15	13
Laborers	3 57	3 37	3 20	13
Potters:				
Journeymen	4 28	5 00	5 71	12
Laborers	....	†35	4 28	12
Porcelain:				
Turners	....	*5 35	‡7 14	12
Painters	....	5 71	....	12
Burners	....	3 57	§7 14	12
Grinders	....	3 57	....	12
Apprentices	....	1 42	1 60	12
In porcelain factories:				
Founders	....	6 06	....	12
Molders	....	6 06	....	12
Burners	....	4 76	....	12
Casters	....	3 37	....	12
Goldsmiths:				
Journeymen	4 76	4 28	4 28	11
Female laborers	....	2 85	3 85	11
Apprentices	....	1 07	1 90	11
In silver goods factories:				
Pressers	5 71	5 00	4 28	10
Rollers	5 71	5 71	4 52	....
Luters	....	5 00	4 28	....
Journeymen silver workers	....	*5 56	*5 71	10
Polishers, female	2 38	2 38	2 14	10
Apprentices	1 07	....	1 19	....
In German silver factories:				
Girdlers	*4 28	*5 71	*6 42	*11
Grinders, workmen	....	5 71	*7 80	11
Locksmiths	....	5 71	*7 80	11
Pressers	....	7 14	....	11
Cutters, female	....	2 85	....	11
Polishers, male	....	3 56	*4 28	11
Polishers, female	....	*4 04	*2 85	....
Apprentices	....	1 07	1 42	....
Workmen	....	4 28	3 20	....
Girdlers:				
Journeymen	4 28	4 28	4 28	12
Apprentices	....	1 20	....	12
Tin founders, journeymen	4 28	4 28	4 76	12
Braziers:				
Journeymen	3 57	4 76	4 28	12
Founders	3 57	4 76	....	12
Turners	3 21	4 28	....	12
Apprentices	0 95	95	1 19	12
Workmen	2 38	3 35	2 85	12
In Berlin brass works:				
Artisans	....	5 71	....	13
Founders	....	6 66	....	13
Operatives	4 76	4 76	4 52	13
In Berlin copper and brass works:				
Artisans	....	5 71	5 71	12
Workmen	4 28	4 85	4 28	12
Coppersmiths:				
Journeymen	4 28	4 28	4 99	12
Laborers	....	3 57	3 57	12

*Piece-work. †Per day. ‡First turner. §First burner.

Exhibit D.—*Comparative statement showing the average rates of wages, &c.*—Continued.

Occupation.	Average wages per week. 1882.	1884.	1885.	Average work-time per day.
In metal goods factories:				*Hours.*
Turners	....	$5 00	$4 07	10
Locksmiths	....	4 28	4 76	10
Coppersmiths	....	5 00	5 71	10
Painters	....	5 00	4 99	10
Girdlers	....	5 95	5 95	10
Polishers	....	4 76	4 99	10
Operatives, male	$3 57	3 21	4 28	10
Operatives, female	2 14	2 38	....	10
Apprentices	....	95	1 42	10
Girdlers, female	....	2 85	2 38	10
In foundries of articles of art:				
Founders, molders	....	3 57	5 71	9
Workmen	....	2 61	2 38	9
Needle-makers, journeymen	3 57	3 57	4 15	12
File-cutter, journeymen	$2 38 to 2 85	4 28	3 57	12
Locksmiths, journeymen	3 57	4 28	4 28	10
Blacksmiths, journeymen	3 57	3 92	4 04	12
Toolsmiths	3 57	3 57	4 28	13
Cutlers	....	4 76	4 28	13
Bladesmiths	4 28	3 57	4 28	12
Steel-pen workers:				
Journeymen	....	5 71	....	11
Girls	....	1 78	....	11
Nailsmiths, journeymen	....	3 57	3 57	....
In engine works:				
Mechanics	*5 71	5 45	4 28	11½
Blacksmiths	*7 37 †5 47	4 76	4 76	11½
Joiners	5 71	4 53	5 95	11½
Molders	5 71	4 53	4 76	11½
Workmen	4 04	3 72	3 80	11½
In sewing-machine factories:				
Locksmiths	....	*5 47	*5 71	11½
Joiners	....	*5 23	*5 71	11½
Workmen, male	....	*4 28	*4 28	11½
Workmen, female	....	*3 33	*2 50	11½
Cartwrights, journeymen	2 57	3 57	4 04	11½
Telegraph makers, journeymen	4 61	4 61	4 61	11½
Mechanicians, journeymen	4 28	4 28	4 28	12
Surgical-instrument makers	4 28 to 4 99	4 76	4 99	9½
Watchmakers, journeymen	4 28	4 28	4 28	12
In lamp factories:				
Braziers	*4 28 to 7 14	5 17	4 80	12½
Girdlers	*4 76 to 7 14	5 00	5 23	12½
Turners	4 76 to 8 33	5 71	4 99	12½
In a chemical factory:				
Foremen	....	5 95	4 76	12
Laborers	3 57	3 54	3 57	12
Lads	....	2 38	2 38	12
Women and girls	....	1 90	$1 60 to 2 85	12
Workers under sixteen years	....	1 42	1 60	12
In an aniline color factory:				
Foremen	....	5 71	6 50	12
Artisans	....	5 71	5 10	12
Laborers	....	3 14	3 86	12
Operatives	....	3 92	....	12
Soap-makers	4 28	4 76	4 28	13
Day laborers	....	3 57	3 57	13
Ethereal oils factory, operatives	....	4 28	4 28	12
Asphalters	....	5 95	6 42	10
Roofers	....	5 23	5 47	10
In silk-goods factories (operatives):				
Male	....	3 92	3 80	13
Female	....	2 14	2 25	11
In wool mills:				
Weavers	*3 57	*3 45	*6 18	10
Shearers	....	5 71	*5 71	10
Winders, female	*2 01	*2 85	*2 38	10
Hand-workers, female	....	2 85	3 33	8½ to 10½
Machine-workers, female	....	2 38	....	8½ to 10½
Warpers, female	....	....	....	10
Ribbon-makers, journeymen	2 85	3 57	....	10
Weavers:				
Journeymen	3 57	3 21	3 21	14
Warpers	....	4 28	4 28	14
Winders, female	1 70	1 78	1 90	14

*Piece-work. †Day work.

Exhibit D.—*Comparative statement showing the average rates of wages, &c.*—Continued.

Occupation.	Average wages per week.			Average work-time per day.
	1882.	1884.	1885.	
Carpet-weavers:				*Hours.*
Operatives	$4 99	$4 28	$4 00	12
Workers, female	1 90	1 90	....	12
Weavers	....	*7 14	*4 28 to 7 14	12
Cloth-makers, journeymen	2 38	2 85	*3 37	12
In a Berlin velveteen factory (master)	....	....	7 85	....
Operatives	3 57	3 21	....	12
Apprentices (lads)	....	2 49	2 85	12
Women	....	2 85	*2 61	12
Girls	1 60	1 90 to 2 14	*2 14	12
In refining works (dressing fabrics):				
Masters	7 14	5 59	7 14	13
Laborers, male	3 57	2 85	3 57	13
Laborers, female	1 60 to 1 90	1 90	2 85 to 4 04	13
Fullers	....	4 28	4 28	13
Carders, female	....	4 28	4 10	13
Silk button and trimming makers:				
Foremen	7 14	7 14	8 50	11
Manager, female	....	2 85	2 85	11
Journeymen	4 99	5 00	4 28	11
Girls	1 90	1 90	1 90	11
Rope-makers:				
Journeymen	3 57	3 57	3 57 to 4 28	12
Lads	....	1 78	1 72	12
Statuary (pasteboard) factories:				
Foremen	....	7 49	....	13
Gilders	....	5 71	....	13
Joiners	....	5 00	....	13
Bookbinders	3 57	3 92	4 00	13
Laborers	....	3 28	3 90	13
Gilders, females	....	2 38	....	13
Tanners:				
Journeymen	4 28	4 64	4 28	13
Workmen	3 57	2 14	3 80	13
Bookbinders:				
Journeymen	3 57	4 04	3 57	12
Girls	2 38	1 90	1 90	12
Gilders, male	....	4 76	3 80 to 4 76	12
Gilders, female	....	2 14	....	12
Harness makers	....	3 57	4 28	10
Wagoners	....	4 04	4 60	10
Upholsterers:				
Journeymen	3 57	4 76	4 99	9½
Women	....	2 38	2 85	9½
Joiners:				
For buildings	4 28	5 00	4 99	13
For furniture	*3 57	*6 42	*4 28	13
Coopers, journeymen	3 80 to 4 28	4 28	4 28	10
Basket-makers, journeymen	....	2 85	2 85	12
Comb-makers, journeymen	3 57	3 57	3 57	13
Varnishers, journeymen	4 28	3 57	4 28	13
Steam millers:				
Firemen	5 71	5 83	5 50	12
Locksmiths	5 59	5 50	5 80	12
Laborers	4 52	4 56	4 99	12
Bakers:				
First journeyman †	2 38	2 85	3 33	13
Second journeyman †		2 14	2 61	13
Third journeyman †		1 78	1 90	13
Butchers, journeymen †	2 14	2 14	2 14 to 2 85	16 to 17
Brewers	4 99 to 7 50	‡23 80	5 30	12
Coopers	4 99 to 6 06	....	5 30	12
Cigar-makers:				
Male	3 57	3 57	3 57 to 4 04	12
Female	1 78	1 78	1 78	12
Linen-makers, foremen	4 28	‡27 37	*28 56	....
Tailors:				
Journeymen	2 85 to 3 57	2 85	2 85 to 3 57	10 to 11
Females	2 14	1 42	2 38	....
Ladies' cloak-makers	4 28	4 28	2 85 to 4 99	....
Females	....	1 66	†2 14	....
Hatters:				
Journeymen	....	4 76	4 99	11
Laborers, female	2 14	2 38	2 85	11
Fur-makers, journeymen	3 57	3 57	3 57 to 4 76	12
Shoemakers, journeymen	*4 28	*2 85 to 3 57	*2 50 to 3 33	12 to 14

*Piece-work. †And free board. ‡Per month.

EXHIBIT D.—*Comparative statement showing the average rates of wages, &c.*—Continued.

Occupation.	Average wages per week.			Average work-time per day.
	1882.	1884.	1885.	
				Hours.
Hair-dressers, journeymen	*$1 70	*$1 10	*$1 90	....
Masons, journeymen	4 28 to 4 76	3 99	5 50	9½
Carpenters, journeymen	4 28	4 21	4 80	9
Glaziers, journeymen	4 28	4 28	3 80 to 4 28	10
Painters, journeymen	4 99	4 28	4 99 to 5 71	9
Roofers, journeymen	5 40	5 71	4 99 to 5 71	10
Chimney-sweepers, journeymen	....	5 16	5 47	10
Type-founders, journeymen	4 28	4 28	4 28	10
Common day laborers:				
Field	....	2 85	2 85 to 3 57	10
Factories	....	3 21		10
Sculptors:				
Plasterers	5 71	5 23	3 80 to 4 04	10
In wood	....	4 76	3 57	10
In gypsum	....	5 23	3 57 to 4 76	10
Molders:				
Journeymen	....	3 57	3 80	12
Apprentices	....	83	83	12
Printing-office of German Empire:				
Setters	5 95	6 75	5 71 to 7 00	10
Copper-plate printers	5 95	6 28	6 20 to 8 00	10
Lithographers	7 14	6 02	6 66	10
Photographers	7 14	7 59	6 66	7 to 9
Engravers	7 14	6 87	6 66	7 to 9

*With board.

EXHIBIT E.—*Daily wages of day laborers (unskilled) in Prussia in* 1885.

Province.	City.	Number of inhabitants.	Average wages.			
			Adults.		Juveniles.	
			Male.	Female.	Male.	Female.
			Marks.	*Marks.*	*Marks.*	*Marks.*
East Prussia	Passenheim	1,967	1.00	0.50	....	....
	Nordenburg	2,515	1.00	0.50	....	....
	Willenberg	2,577	1,00	0.50	....	....
	Landsberg	2,751	1.00	0.50	....	....
	Pillau	3,225	2.00	1.00	....	....
	Mehloack	3,760	1.09	0.50	....	....
	Justerburg	18,745	1.20	0.80	....	....
	Tilsit	21,400	1.20	0.80	0.50	0.40
	Koenigsberg	140,909	1.70	0.70	1.25	0.40
	Average	....	1.23	0.64	0.87	0.40
West Prussia	Vandsburg	1,661	1.62	0.85	....	....
	Loebau	4,857	0.80	0.40	....	....
	Thorn	20,617	1.20	0.80	0.60	0.60
	Elbing	35,842	1,50	1.00	0.65	0.55
	Danzig	108,551	1.80	1.25	0.65	0.55
	Average	....	1.38	0.86	0.63	0.57
Brandenburg	Neudamm	3,775	1.40	1.00	....	....
	Baerwalde	3,901	1.40	1.00	....	....
	Cüstrin	14,069	1.40	1.00	....	....
	Landsberg a. W	23,612	1.20	0.80	0.60	0.60
	Cottbus	25,584	1.20	0.80	0.60	0.60
	Guben	25,840	1.20	0.80	0.60	0.60
	Brandenburg a. H	29,066	2.00	1.20	0.90	0.90
	Spandau	29,311	2.50	1.50	0.80	0.80
	Charlottenburg	30,483	2.00	1.00	0.75	0.50
	Pottadam	48,447	1.85	0.90	0.80	0.70
	Frankfurt a. O	51,147	1.40	1.00	0.60	0.60
	Berlin	1,122,386	2.40	1.50	1.30	1.00
	Average	....	1.66	1.04	0.77	0.70

Exhibit E.—*Daily wages of day laborers (unskilled) in Prussia in* 1885—Continued.

Province.	City.	Number of inhabitants.	Average wages.			
			Adults.		Juveniles.	
			Male.	Female.	Male.	Female.
			Marks.	*Marks.*	*Marks.*	*Marks.*
Pomerania	Grefswald	19,924	1.50	1.00		
	Stolp	21,591	1.60	1.10	1.00	0.65
	Stargard	21,816	1.20	1.70	0.50	0.40
	Stralsund	29,481	1.50	1.00	0.60	0.40
	Stettin	91,756	2.00	1.00	1.00	0.60
	Average		1.56	0.96	0.77	0.51
Posen	Nakel	6,035	1.50	1.00		
	Inouraslaw	11,558	1.50	1.00		
	Schneidemuehl	11,610	1.50	1.00		
	Bromberg	34,044	1.50	1.00	1.00	0.75
	Posen	65,713	1.60	1.00	0.75	0.50
	Average		1.52	1.00	0.87	0.62
Silesia	Georgenberg	1,259	1.20	0.80		
	Tarnowitz	7,956	1.20	0.80		
	Kattowitz	12,623	1.20	0.80		
	Neisse	20,507	1.10	0.80	0.70	0.70
	Beuthen	22,811	1.20	0.80	0.60	0.60
	Schweidnitz	22,202	1.30	0.85	0.70	0.50
	Koenigshütte	27,522	1.20	0.80	0.60	0.60
	Liegnitz	37,154	1.50	1.00	0.60	0.60
	Goerlitz	50,307	1.60	1.00	0.80	0.60
	Breslau	272,912	1.60	1.00	0.80	0.60
	Average		1.31	0.86	0.69	0.60
Saxony	Langensalza	10,538	1.60	0.90		
	Muelhausen i. Th	23,478	1.60	0.90	0.70	0.70
	Nordhausen	26,198	1.20	0.80	0.60	0.60
	Newstadt-Magdeburg	27,090	2.00	1.20	1.00	0.75
	Halberstadt	31,360	2.00	1.20	0.90	0.80
	Erfurt	53,254	1.60	0.90	0.70	0.70
	Halle	71,484	2.10	1.40	1.20	1.00
	Magdeburg	97,539	2.00	1.40	1.20	1.60
	Average		1.76	1.09	0.90	0.79
Schleswig-Holstein	Flensburg	30,956	2.00	0.80	1.30	0.60
	Kiel	43,594	2.70	1.00	1.60	0.50
	Altona	91,047	2.50	1.00	1.80	1.00
	Average		2.40	0.93	1.57	0.80
Hanover	Meppen	8,417	2.00	1.50		
	Harburg	19,071	2.40	1.50		
	Osnabrueck	22,384	1.80	1.20	1.10	0.80
	Hildesheim	32,812	1.80	1.25	1.10	1.00
	Hanover	122,843	2.00	1.50	1.20	1.00
	Average		1.92	1.32	1.10	0.85
Westphalia	Hiddingsel	589	1.30	1.00		
	Buldern	1,145	1.30	1.00		
	Boryenstreich	1,535	1.00	0.60		
	Recklinghausen	7,296	2.30	1.60		
	Hamm	20,783	1.75	1.40	1.20	0.80
	Witten	21,554	2.20	1.50	1.10	0.90
	Hagen	26,295	2.10	1.40	1.20	1.00
	Bielefeld	30,679	1.80	1.40	1.20	0.80
	Bochum	33,445	2.20	1.50	1.10	0.90
	Münster	40,444	2.25	1.50	1.00	0.75
	Dortmund	66,544	2.00	1.40	1.20	0.80
	Average		1.84	1.30	1.14	0.85
Hesse-Nassau	Hanau	23,086	1.75	1.25	1.00	0.70
	Wiesbaden	50,238	2.10	1.40	1.00	0.65
	Kassel	58,314	2.12	1.38	1.22	0.80
	Frankfurt a. M	136,819	2.40	1.70	1.40	1.00
	Average		1.84	1.30	1.14	0.85

EXHIBIT E.—*Daily wages of day laborers (unskilled) in Prussia in* 1885—Continued.

Province.	City.	Number of inhabitants.	Average wages.			
			Adults.		Juveniles.	
			Male.	Female.	Male.	Female.
			Marks.	*Marks.*	*Marks.*	*Marks.*
Rhenish Prussia	Prüm	2,176	2.00	1.50	....	....
	Mühlheim a. R	20,420	2.50	1.50	1.50	1.00
	Vierzen	20,997	2.00	1.50	1.00	0.80
	Wesel	20,593	2.00	1.40	1.00	0.80
	Mühlheim a. d. Rhur	22,146	2.50	1.50	1.50	1.00
	Trier	24,200	1.60	1.35	0.70	0.50
	Remschid	30.029	2.20	1.50	1.00	0.80
	Coblenz	30,567	1.80	1.20	1.00	0.40
	Bonn	31,514	2.00	1.20	1.00	0.80
	M. Gladbach	37,387	2.00	1.50	1 00	0.80
	Duisberg	41,242	2.40	1.50	1.20	0.80
	Essen	56,957	2.40	1.50	1.20	0.80
	Crefeld	73,872	2.40	1.50	1.20	1.00
	Aachen	85,551	2.00	1.20	1.00	0.70
	Elberfeld	93,538	2.40	1.50	1.00	0.80
	Düsseldorf	95,459	2.40	1.50	1.20	0.80
	Barmen	95,941	2.40	1.50	1.00	0.80
	Cologne	144,751	2.50	1.50	1.50	0.80
	Average	....	....	......	....	....
Hohenzollern	Hechingen	3,687	2.00	1.20	....	....
The Hanse towns	Bremen	112,114	2.50	2.00	1.25	1.25
	Hamburg	410,127	2.50	1.85	1.00	1.00
	Average	....	....	....	....	....
	Prussian states	....	1.76	1.09	0.97	0.69
	Hanse towns	....	2.50	1.92	0.98	0.72

Exhibit F.—*Weekly consumption of a workman's family in winter.*

Victuals, fuel, light, and lodging.	Family living in the country (parents and 3 children of between 7 and 17 years of age).			Family living in a larger city (parents and 6 children of between 3 and 17 years of age).		
	Quantity.	Cost.		Quantity.	Cost.	
		Marks.	Equivalent in United States currency.		Marks.	Equivalent in United States currency.
	Kilogram			*Kilogram*		
Potatoes	15.00	1.20	$0 28½	40.00	2.80	$0 66⅝
Vegetables	....	....	....	....	1.40	83 3/10
Rye bread	16.00	3.00	71⅜	20.00	3.25	77
Wheat bread	....	.90	21	....	.60	14
Beef (twice a week)	1.00	1.00	23¾	.50	.60	14
Soup ingredients	....	....	....	....	.16	3¾
Butter	.87½	2.30	54¾	1.00	3.15	74 9/10
Lard and grease of beef	.25	.35	8 3/10	.70	1.05	24 9/10
Bacon	1.00	1.40	30	....	....	....
Rape-seed oil	.75	.53	12⅝	.50	.30	7
Eggs, 6 pieces	....	.35	8	....	....	....
Rye flour	1.00	.36	8½	.50	.18	4
Wheat flour	1.00	.40	9½	....	....	....
Peeled barley	.50	.13	3	.50	.16	3¾
Rice	.50	.25	5⅞	....	....	....
Peas, beans, lentils	1.00	.40	9½	2.00	.80	19
Salt	.50	.12	2⅞	.70	.21	4 9/10
Spice	....	.15	3½	....	.06	1 4/10
Onions	....	....	....	.50	.08	1 9/10
Beer vinegar	1.00	.08	1 9/10	1.00	.08	1 9/10
Coffee	.87½	1.28	30½	....	1.05	24 9/10
Parched barley	.25	.10	2	....	....	....
Sugar	.25	.20	4¾	....	....	....
Crushed candy	.12½	.18	4 3/10	....	....	....
Currants	.25	.25	5⅞	....	....	....
Tobacco	....	.60	14	.25	.50	11 9/10
Coal and matches	50.00	.80	19	35.00	.98	23
Petroleum	2.00	.55	13	1.75	.35	8
Soap:						
Black	.75	.35	8	.50	.20	4¾
White	.25	.20	4	.70	.56	13 3/10
Soda	....	.05	1	....	.06	1⅜
Rental	(*)	3.00	71	(†)	3.50	83 3/10
Total	....	20.48	4 87	....	22.08	5 25

* Three to four rooms. † Three rooms.

COLOGNE.

REPORT OF CONSUL WAMER, OF COLOGNE.

Before I proceed to reply more directly to the interrogatories with reference to statistics and other information asked for in Department of State circular dated April 27, 1886, I desire to show the view taken of this matter in Germany, inasmuch as the discussion of this question here at the present day is considered of the utmost importance, more especially since the colonial policy of Germany has been inaugurated.

One of the most difficult problems which the German Government has had to deal with in latter years has been the question of emigration, and an earnest desire has been evinced to devise ways and means to check its course. For this purpose measures have been brought forward and submitted to trial, and although the exodus since 1881 has been less alarming, the emigration still continues on an extensive scale.

POPULATION.

The population in Germany in 1871 amounted to 41,058,792, and in 1885 to 46,840,587; showing an increase for this period of 5,781,795.

During this interval from 1871 to 1885 the emigration of Germans from German ports, Antwerp, and Havre, not reckoning those who emigrated by way of Holland and Great Britain, reached 1,478,887, or more than 20 per cent. of the increase of the population. It is estimated that the emigration during the last sixty years amounted to 4,500,000. Besides the loss of so much body and mental strength, it is computed that in respect to education alone a capital of about 25 milliards has been lost to the nation.

In the year 1881 the emigration reached its climax, amounting to 221,304, or about double the number of the preceding year. This state of things created alarm, and the matter was repeatedly referred to in the German Reichstag. The Government, having hitherto been fencing rather than dealing practically with the question, found it then necessary to devote special attention to the matter. Several remedial measures were proposed, but they failed to overcome the evil.

COLONIAL POLICY.

Under such circumstances the Government resolved to turn the efflux, if possible, into other and new channels, and from that date a colonial policy came into existence. The results of this policy are sufficiently known, but it cannot be said that amongst emigrants these colonization schemes ever found much favor, as the new German settlements offered but a poor trade and altogether few advantages and inducements. Nevertheless associations have been formed in Germany for advocating these colonial projects, their principal object being to divert the flow of emigration from the United States, and to direct the attention of emigrants to other countries, where, as it was hoped, they would do better and need not lose their nationality. One of these societies, the *Kolonial Verein*, held recently an important meeting in Karlsruhe, on which occasion one of the speakers made the following remarks:

> It is not to be denied that the 8,000,000 of Germans now living in the United States, consisting of emigrants of two generations, will be able to effect much for the future development of the Union, but still it is true as well that the chances of prospering in the United States are not so favorable as they were twenty or thirty years ago. In the same measure as the chances become poorer we ought, for sake of humanity and policy, devote our labors toward finding for the German emigrant other countries, where he will not only meet with a kind reception and with fair means of existence, but also be able to retain his German nationality, and likewise the German language and his German habits. By such means he keeps up his relationship with Germany. Look, for instance how those three Brazilian provinces, Rio Grande do Sul, Parana. and Santa Catharina, where about 20,000 Germans are living, have developed themselves. These Germans have not only retained their language and habits, their church and school, but the trade is principally in the hands of these Germans, and besides they exercise an important political influence over the provincial government. The emigration to South America, as compared with North America, is so far insignificant. Much, however, is to be said in favor of emigration to South America, and altogether the chances of prosperity are now greater, especially in South Brazil, than in North America.

These societies may and do exercise some influence, but for the present at least the probability is but slight that the majority of emigrants will prefer other countries to the United States. The settled and comfortable homes of so many Germans in the United States, and the free institutions of that country, form an attraction too powerful for the German emigrant to resist.

STATISTICS OF EMIGRATION.

The following statistics show the number of emigrants that left Germany, via German ports and Antwerp, during the period from 1871 to 1885, inclusive, and to what country:

TABLE A.

Years.	Total ascertained number of emigrants.	Port of departure.			
		Bremen.	Hamburg.	Stettin.	Antwerp.
1871	75,912	45,658	30,254	....	....
1872	125,650	66,919	57,615	....	1,116
1873	103,638	48,608	51,432	....	3,598
1874	45,112	17,907	24,093	1,536	1,576
1875	30,773	12,613	15,826	268	2,066
1876	28,368	10,972	12,706	202	4,488
1877	21,694	9,328	10,725	75	1,836
1878	24,217	11,329	11,827	85	976
1879	33,327	15,828	18,165	245	4,089
1880	106,190	51,627	42,787	552	11,224
1881	210,547	98,510	84,425	1,434	26,178
1882	193,869	96,116	71,164	1,936	24,658
1883	166,119	87,739	55,666	546	22,168
1884	143,586	75,776	49,985	750	17,075
1885	103,642	52,328	35,335	1,237	14,742
Total	1,412,914	701,258	567,005	8,868	135,785

Years.	Destination.								
	United States.	British North America.	Mexico and Central America.	West Indies.	Brazil.	Other ports of America.	Africa.	Asia.	Australia.
1871	73,816	9	21	87	920	263	18	11	817
1872	119,780	690	38	61	3,508	387	2	12	1,172
1873	96,641	49	82	28	5,048	496	4	9	1,331
1874	42,492	138	24	83	1,019	418	5	83	900
1875	27,834	88	26	47	1,387	377	1	37	1,026
1876	22,767	11	8	85	3,432	804	54	81	1,226
1877	18,240	11	25	243	1,069	289	750	31	1,306
1878	20,873	89	22	74	1,048	449	394	50	1,718
1879	30,808	44	17	59	1,630	441	23	31	274
1880	103,115	222	19	100	2,119	420	27	36	132
1881	206,189	286	56	58	2,102	762	314	85	745
1882	189,873	383	65	39	1,286	1,101	335	40	1,247
1883	159,894	591	52	32	1,583	1,041	772	50	2,104
1884	139,339	728	39	20	1,253	1,276	230	35	666
1885	98,628	692	39	24	1,713	1,576	294	72	604
Total	1,349,289	3,981	483	940	29,117	10,100	3,223	513	15,268

Of 1,000 emigrants, 955 went to United States; 2.8 to British North America; 0.3 to Mexico and Central America; 0.7 to West Indies; 20.6 to Brazil; 7.1 to other ports of America; 2.3 to Africa; 0.4 to Asia; and 10.8 to Australia.

The foregoing official figures do not include the German emigrants who embarked via Havre, Holland, and Great Britain. Of the two latter I could find no official report. As to Havre, the following are the official numbers of German emigrants from 1871 to 1885:

Years.	No.	Years.	No.
1871	287	1880	10,757
1872	2,593	1881	10,251
1873	6,776	1882	9,590
1874	2,511	1883	7,455
1875	1,480	1884	5,393
1876	1,258	1885	2,790
1877	930		
1878	1,399	Total	65,973
1879	2,485		

By adding the number of emigrants who went by Havre in the fifteen years to the number who emigrated during the same period by way of German ports and Antwerp, as given in Table A, the total is increased to 1,478,887.

To every 100,000 inhabitants the different provinces of Germany furnished the following quota:

TABLE B.

Provinces.	1873.	1880.	1885.	Provinces.	1873.	1880.	1885.
East Prussia	492	56	92	Saxony (Kingdom)	96	139	92
West Prussia		857	720	Wurtemberg	254	444	258
Brandenburg with Berlin	125	134	169	Baden	297	311	220
Pommerania	959	691	762	Hesse	235	326	259
Posen	702	601	586	Mecklenburg	1,085	241	393
Silesia	57	70	71	Oldenburg	863	290	402
Saxony	72	63	87	Brunswick	93	103	76
Schleswig-Holstein	596	569	561	Thuringia	143	118	118
Hanover	338	350	421	Anhalt	64	55	45
Westphalia	79	153	120	Waldeck	166	242	354
Hesse-Nassau	253	268	231	Lippe	113	133	242
Rhineland	60	95	87	Lubeck	163	149	208
Hohenzollern	156	231	156	Bremen	408	560	589
Bavaria	184	183	166	Hamburg	831	839	368
Palatinate	281	263	307	Alsace-Lorraine	30	17	48

The following table represents the number of German emigrants, according to sex, from the different states and provinces by way of German ports and Antwerp during the year 1885, as also the respective population on the 1st of December, 1885:

TABLE C.

German states and provinces.	Number of emigrants during the year.			Emigrated to the United States.			German population.
	Males.	Females.	Total.	Males.	Females.	Total.	
East Prussia	941	846	1,787	907	829	1,736	1,958,858
West Prussia	4,916	4,905	9,821	4,657	4,694	9,351	1,407,960
Brandenburg with Berlin	3,301	2,851	6,152	2,818	2,550	5,368	3,657,892
Pommerania	5,646	5,744	11,390	5,465	5,607	11,072	1,505,795
Posen	4,923	4,861	9,784	4,840	4,799	9,639	1,715,024
Silesia	1,601	1,268	2,869	1,441	1,151	2,592	4,111,309
Saxony	1,211	853	2,064	1,029	749	1,778	2,427,979
Schleswig-Holstein	3,400	2,906	6,306	2,998	2,664	5,662	1,150,233
Hanover	4,915	4,130	9,045	4,760	4,044	8,804	2,172,294
Westphalia	1,467	1,073	2,540	1,414	1,032	2,446	2,202,726
Hesse-Nassau	1,980	1,686	3,666	1,901	1,652	3,553	1,592,162
Rhineland	2,254	1,449	3,703	2,130	1,413	3,543	4,344,802
Hohenzollern	51	51	102	51	50	101	66,709
Bavaria	5,591	4,348	9,939	5,515	4,318	9,833	5,416,180
Saxony (Kingdom)	1,655	1,230	2,885	1,482	1,173	2,655	3,179,168
Wurtemberg	2,734	2,370	5,104	2,660	2,335	4,995	1,994,849
Baden	1,935	1,541	3,476	1,896	1,514	3,410	1,600,839
Hessen	1,362	1,141	2,503	1,350	1,139	2,489	956,170
Mecklenburg-Schwerin	1,211	1,010	2,221	1,173	992	2,165	575,140
Saxony-Weimar	229	195	424	210	186	396	313,668
Mecklenburg Strelitz	205	186	391	203	186	389	98,371
Oldenburg	776	619	1,395	741	606	1,347	341,250
Brunswick	166	113	279	148	104	252	372,580
Saxony-Meiningen	161	128	289	153	124	277	214,697
Saxony-Altenburg	47	30	77	42	27	69	161,129
Saxony-Coburg-Gotha	143	134	277	135	131	266	198,717
Anhalt	82	31	113	73	30	103	247,603
Schwarzburg-Sondershausen	44	33	77	44	33	77	73,623
Schwarzburg-Rudolstadt	78	67	145	74	64	138	83,939
Waldeck	108	89	197	106	89	195	56,565
Reuss, elder branch	27	17	44	23	17	40	53,787
Reuss, younger branch	55	43	98	52	42	94	112,118
Schaumburg-Lippe	45	30	75	39	30	69	37,204
Lippe	186	131	317	181	131	312	123,250
Lubeck	88	65	153	72	59	131	67,658
Bremen	507	484	991	460	462	922	166,392
Hamburg	1,250	822	2,072	854	644	1,498	518,712
Alsace-Lorraine	440	289	738	447	288	735	1,563,145
Uncertain	87	46	133	81	45	126	....
German Empire	55,827	47,815	103,642	52,625	46,003	98,628	46,840,587

It will be seen by Table A that the total number of emigrants who embarked from the ports of Bremen, Hamburg, Stettin, and Antwerp, amounted to 103,642 during the year 1885. Of this number the age ranges as follows:

Age.	Males.	Females.	Total.
Under one year	2, 243	2, 322	4, 565
From one to six years	4, 945	4, 765	9, 710
From six to ten years	4, 772	4, 563	9, 335
From ten to fourteen years	2, 263	2, 028	4, 291
From fourteen to twenty-one years	10, 733	10, 322	21, 055
From twenty-one to thirty years	16, 068	11, 710	27, 778
From thirty to forty years	7, 504	5, 364	12, 868
From forty to fifty years	3, 700	3, 191	6, 891
From fifty to sixty years	2, 203	2, 213	4, 416
From sixty to seventy years	1, 101	1, 112	2, 213
Above seventy years	213	175	388
Age not ascertained	82	50	132
Total	55, 827	47, 815	103, 642

CLASSES WHICH SUPPLY THE GREATEST NUMBER OF EMIGRANTS.

The greatest number of emigrants is supplied by the agricultural class from comparatively thinly populated districts where they have been able to save a little money. In referring to Table C, it will be seen that Pommerania, Posen, West Prussia, Hanover, and Schleswig-Holstein, principally agricultural sections, furnish the largest contingent of emigrants, while the industrial districts of Westphalia, Rhineland, Silesia, and Saxony, with large populations, furnish less.

CAUSES OF THE EMIGRATION.

The chief causes of the emigration are not to be attributed either to compulsory military service or to onerous taxation, strikes, or over-population. There are, no doubt, some instances where the compulsory military service has led to emigration, but generally speaking the military service is not objected to, but even liked by the majority of high-spirited young men. As a rule they take a pride in the service and are fond of military appearance. According to the opinion which I have formed, I believe that the service, severe as it may be at times, does the young men of this country good; it gives them manly strength, teaches them to be orderly and careful, and instills in them a respect for authority. The cause of emigration is not to be found in a love for adventure, but from a desire of the emigrant to purchase out of his small savings land on more favorable terms than he can do at home, and thus become owner of property—a position which he can very rarely ever hope to attain in his country. The percentage of emigrants from the industrial laboring classes is small, which is no doubt to be attributed to their not being able to save out of their slim earnings a sufficient amount to allow them to emigrate. While they do not earn more than is sufficient for them to exist, they seem, as a rule, more contented with their position.

It has always been characteristic of the German race that they entertained from the earliest ages a strong desire to possess land of their own, and at the Karlsruhe meeting (to which I have already called attention) Professor Eggert* made the following remarks on the subject.

> From the earliest ages the Germans have taken to wandering, partly because their own country did not offer them sufficient means of existence, and partly from a desire to become owners of land. This tendency exists to the present day. The agricultural interest has suffered more than that of the trade industries, and consequently the German, weary of waiting for better days, collects his savings and then leaves his country sadly but hopefully in order to seek his fortune in foreign lands, and especially to realize the ideal wish of his life—to become owner of land. These have been and continue to be the reasons which force Germans to leave their country, and in reconciling ourselves to this situation it is best to do all we can to reduce the evil as far as possible, and to turn the matter to some practical good both for Germany and for those who take leave of Germany.

Professor Eggert suggests, in order to prevent emigration, the utilization of the woods and forests, which constitute a fourth part of the area of Germany, by turning them into arable land, meadows, and fields; but according to his own showing such a transformation would take a great number of years, and according to his calculation during that time at least nine-tenths of about the present number would be obliged to emigrate. As this plan would hardly recommend itself, he advises intending emigrants to turn their attention to the German colonies for two reasons; first, land would eventually be obtained for very little outlay without the necessity of denaturalization; and, secondly, such colonization would be useful to the German export trade, consequently a direct benefit to Germany.

SOCIAL CONDITION OF THE PEOPLE.

In my report sent with dispatch dated May 21, 1886,† I gave a fair sketch of the social condition and manner of living of the laboring classes. With respect to the latter, marriage, although contracted sometimes too early, is a great advantage, and it is here that I desire to speak in the highest praise of their industrious and economical wives. They not only attend to their household affairs, but in many instances do much outdoor work, and thereby aid in the support of their families equally as much as their husbands. Indeed, I do not believe that the wives of the work-people of any other nation toil as much as they do in this country.

With regard to divorce and illegitimacy it cannot be laid to the charge of Germany that such evils are of any frequency.

In this connection it may be interesting to give some information as to how the agricultural holdings in the German Empire are apportioned.

The number of farms in the German Empire is given as 5,276,344, amounting to 31,868,972 hectares, or 79,672,430 acres.

The sizes of these farms are classified as follows:

From 0 to 2 ares‡	66,143
2 to 5 ares	195,298
5 to 20 ares	656,193
20 to 1 hectare§	1,405,682
1 to 2 hectares	738,515
2 to 5 hectares	981,407
5 to 10 hectares	554,174
10 to 20 hectares	372,431
20 to 50 hectares	239,887

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*The manager of the Colonization Society of Germany.

†Printed in Consular Reports No. 65, July, 1886, p. 271.

‡One are equals 0.0247 acre.

§One hectare equals 2.471 acres.

From 50 to 100 hectares	41,623
100 to 200 hectares	11,033
200 to 500 hectares	9,814
500 to 1,000 hectares	3,629
1,000 and upwards	515

The above figures show that of the 5,276,344 agricultural holdings about 17½ per cent. are from 0.0247 to one-half acre, 26 per cent from ½ to 2½ acres, 14 per cent. from 2½ to 5 acres, 18 per cent. from 5 to 12 acres, 17½ per cent. from 12 to 50 acres, 5½ per cent. from 50 to 247 acres, 0.40 per cent. from 247 to 1,235 acres, 0.07 per cent. from 1,235 to 2,420 acres.

The proportion of farm owners to the renters is given as follows:

Size of farms.	Owners.	Renters.
Below to 2½ acres	1,631,336	691,980
2½ acres to 247 acres	2,157,640	116,456
247 acres to 2,471 acres	638,414	15,527
2,471 acres and upwards	19,817	5,174

These figures show that out of the 5,276,344 agricultural holdings about 15.7 per cent. are rented.

In conclusion it may be said that while the number of emigrants to the United States of America is proportionately large it must not be overlooked that these emigrants are not such a great loss to Germany after all. The value of the exports from Germany to America in latter years amounts annually to an average of about $60,000,000, a trade which, I venture to say, is almost entirely kept up by the Germans themselves, and consequently it is obvious that Germany, on the other hand, is very materially benefited by their people in America.

WM. D. WAMER,
Consul.

UNITED STATES CONSULATE,
Cologne, June 1, 1886.

CREFELD.

REPORT OF CONSUL POTTER.

In compliance with instructions contained in Department circular dated April 27, 1886, requiring information regarding the "extent and character of the emigration from the consular district of Crefeld," I would report that careful inquiries at the offices of the local authorities and at the various chambers of commerce in this district reveal the fact that no records or statistics are there to be found which exhibit the "extent and character of emigration from this particular district," or which refer to the subject in any way.

Records relating to emigration from the Kingdom of Prussia appear to be kept only at Berlin. The extent of emigration from the entire Kingdom may, as I am informed, be approximately determined there, but it is difficult to show the destination, or what number or proportion of the total emigration seek particular countries. A large number of German emigrants embark at ports in Holland and Belgium, but the German records follow them only to the frontiers of those countries, and show them as having emigrated to Holland and Belgium, while their ultimate destination was to lands that lay beyond the seas.

It may, however, be stated that the number emigrating from this consular district to America is very small when compared with the number leaving other parts of the Kingdom.

The class emigrating from the Crefeld district for America are mostly expert and reputable artisans connected with some branch of the great textile industry which centers in Crefeld. Persons of this class seldom leave this locality unless induced to do so by the certainty of higher wages in positions previously secured for or offered to them in similar industries.

The causes of limited emigration from this district are to be found in the fact—many times referred to in previous reports from this consulate—that the manufacture of silk goods in this locality is a "house industry," carried on in thousands of little homes scattered over a broad district of fertile country of which Crefeld is the center or counting-house, from which work for the weavers is distributed and received, and paid for when finished.

The maintenance of the weavers' "industrial homes" is encouraged and aided by manufacturers as a means of permanently retaining and controlling experienced and reliable employés. Though the earnings of the silk weavers are meager in the extreme, they love their homes and little gardens, and cling to them with a degree of attachment which threatening famine cannot sever. There are in Crefeld and surrounding country between 200,000 and 300,000 of this class of artisans, including the numerous members of their usually large families.

The social and moral condition of the "home workers" is higher than that of the factory hands in the city, and is widely different in many advantageous ways. There seems to be an element in the atmosphere surrounding "a home" that softens and refines the natures of the occupants and lifts them to a higher plane in social existence. They seldom express a desire to leave their homes and fatherland, and they are too poor to command the necessary means to emigrate, even if they desired so to do.

The attitude of the local governments and the manufacturers in this locality is that of opposition to emigration. They would rather, for the reason named, assist this class of artisans to remain where they are.

Deportation of chronic paupers, insane persons, or criminals to the United States from this district is not known to me. Had such events come to my knowledge they would, of course, have been immediately reported to the Department. It can, therefore, in a general way be said that from the Crefeld district no dangerous class of emigrants have gone to the United States during the past five years.

Instances worthy of mention and inviting some reflection are, however, known where expert dyers and Jacquard weavers, who appeared to be contented here with maximum wages of not more than $4 per week of seventy-two hours' labor, accepted offers and emigrated to the United States, where they earned from $15 to $18 per week of 60 hours, but who there soon became discontented and joined others in a strike for higher wages. It is known that a number of these persons have from choice returned and resumed their former situations at $4 per week of seventy-two hours, and again appear to be contented.

Strikes are of rare occurrence in this district, and when one does take place it is usually confined to a single manufacturing establishment, and is not continued longer than one day. The fact is, as previously reported, operatives here cannot afford to strike. Their earnings are so small that savings are impossible, and they have no means with which to support a strike. A few days without employment brings them face to face with the skeleton of starvation. It is only in comparatively prosperous communities that an effective strike in this country is possible, unless one is undertaken with a view to a violent appropriation or destruction of property belonging to classes of wealth. In Germany, whose army is so thoroughly in hand at all points, violence of that character is nearly impossible, and is not thought of or feared in any quarter.

THE GENERAL AND LOCAL GOVERNMENTS AND THE WORKING CLASSES.

After conferring with many intelligent representatives of the working people, the conclusion naturally arrived at is that the comparative degree of contentment which appears to prevail among the artisan classes of this district, and perhaps throughout the Kingdom of Prussia, is due to their intelligence and correct comprehension of prevailing facts. They know that the fortunes of manufacturers are generally small and slowly accumulated. There is not in this locality any sudden accumulations of wealth resulting from manufacturing operations. An interest of 5 or 6 per cent. on invested capital coupled, with the work, responsibility, and care of the manufacturer, will at this date correctly measure the limit of the capitalist's gains. It is known, too, that the extreme of economy and financial prudence is practiced in the management of the general and local governments, and that no great enterprises involving the expenditure of public treasure are undertaken unless in behalf of interests favorably affecting the laboring classes. The imperial and state governments and the local governments in Germany, while working under the disadvantage of overpopulation, appear to be ceaseless in earnest practical efforts to promote the commerce, manufactures, and trade of the country with a view of keeping its people busy. To accomplish such an object seems to be regarded as the very essence of the functions of Government.

The public servants of Prussia, in all departments of Government, seem to realize that a busy people are contented, and that idleness breeds discontent and anarchy.

The recent acquisition by Germany of territory in different parts of the earth was undertaken with the sole view of finding homes and business for her redundant population, and at the same time creating a market for the products of home industries. The emigration of certain classes to these localities under German control is encouraged, and, while no serious restraint is put upon emigration to other countries, it is not, I think, encouraged by the Government.

The burdens of general and local taxation are heavy, but it is well understood that they are as light as it is possible to make them. No one complains of waste or extravagance in public expenditures. The army is enormous in numbers, but it is maintained at a minimum of cost. The pay of its officers is in due proportion to that of the common soldier, who receives but 5 cents per day, and with this sum he is obliged to keep his equipments in a condition of perfect order and neatness, and purchase for himself coffee, shoe-blacking, and the material with which he polishes the buttons and whitens the belt of his uniform. There are hardships connected with this enforced economy, but it is a rare circumstance to meet a complaining German soldier, or one who is not proud of his connection with the army.

Suppose, with a view of reducing national expenditures, it were possible, in the presence of jealous and rival neighbors, to abolish the army and send the soldiers back to the farms, factories, and workshops. The products of the farm would not be greater, because there is now more hands than are needed to draw from the soil, which is all under cultivation, its utmost yield. The product of the workshop and factory might be increased, but the present output is already larger than the market demands. It is, therefore, assumed that the five or six hundred thousand young men now in the army, if liberated, would add nothing as producers to the wealth of the overpopulated country, while the Government can, by healthful training, improve their minds and bodies and give them a wholesale support as soldiers much cheaper than it could be retailed to them at home, where they can neither find room nor productive occupation.

To the suggestion that the men might relieve the peasant women of the masculine work now performed by them, the answer is made, "That would add nothing to the productive wealth of the country, and besides, what would the peasant women with good appetites do?"

Such is the logic of intelligent workingmen with whom I have conversed. They understand the inevitable industrial condition of their country, and adequately measure the relations of the Government to the working classes. The policy of the Government touching import duties and systems of collecting revenue is sometimes questioned, but its purpose to benefit the laboring classes and faithfully serve the public welfare is seldom doubted.

While, therefore, the artisan class here may regard their lot in life as hard to bear, they do not trace the cause of it to rulers and politicians, or to laws and customs, nor to the inhumanity and indifference of society and the communities in which they live. They solve the difficulty with a shrug of the shoulders, and simply say, "There too many of us," and wisely conclude that complaints are useless when there are no visible remedies to apply to them but emigration. For these reasons they resolve to be contented and study methods of extracting from life all the fractions of happiness accessible to them. And the amount of personal enjoyment which a German artisan manages to secure by an ingenious use of his scanty earnings might furnish valuable suggestions to those who are uneasy and discontented until they have attained the rank of "millionaire."

The efforts during the last three or four years of the general and local governments to improve the condition of the laboring classes has had a tendency to check emigration to the United States. Satisfaction with the work of rulers has produced, in a degree, contentment and hope, and it is only the more undesirable classes who are now not unwilling emigrants from their fatherland.

In further replying to the fourth inquiry of the circular, I beg to say, "the general manner of living, as regards housing, eating, and clothing" of the artisan class in this district has been fully described and illustrated in several reports of recent date from this consulate, to which I respectfully refer as follows:

Report on Labor in Europe, 1884; also to Report on Improved Machinery for the Manufacture of Textile Goods, 1885, pages 408 to 410; also to Report on Leather, Boots and Shoes, 1885, and to Report on Agriculture in Germany, 1886.*

The following tables give the latest accessible information regarding "marriages and divorce facts, children, 'natural' and legitimate, religion, emigration, births," &c.

J. S. POTTER,
Consul.

UNITED STATES CONSULATE,
Crefeld, *June*, 1886.

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*See Labor in Europe, I, 324-353; Consular Reports No. 66, August, 1886, 287-339; No. 59, December, 1885, 402.

Number of marriages, and the religion of the parties, in the consular district of Crefeld during the year 1884; also the number of deaths and the number of divorces during the same period; also showing the immigration into the district from all countries, including returned German emigrants who left the district with and without Government consent, and who were renaturalized after their return; also showing the percentage of illegitimate births and the proportion of still-born legitimate and illegitimate children.

Local districts included in the consular district of Crefeld.	Marriages.					Divorces.	Percentage of illegitimate births in total number born.	
	Religion.				Total.	Number recorded in the year 1884.		
	Protestant.	Catholic.	Jews.	Other denominations.			Males.	Females.
Cleve	31	285	6	9	331	....	3.4	2.5
Rees	133	269	4	40	446	....	3.1	3.6
Crefeld	117	777	11	138	1,043	5	3.7	5.4
Duisburg	149	161	3	108	421	....	3.3	2.4
Moers	264	231	2	23	520	....	3.9	2.2
Kempen	15	729	2	5	751	....	3.3	3.4
Gladbach	167	853	7	47	1,074	....	2.9	2.4
Geldern	13	352	3	7	375	....	2.0	2.4
Total	889	3,657	38	377	4,961	5	25.6	24.3

Local districts included in the consular district of Crefeld.	Deaths (including still-born).						Number legitimate in 1,000 of still-born.	
	Total.		In public hospitals.		Children one year of age and under, legitimate and illegitimate.			
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Cleve	609	542	33	27	306	18	1.3	1.3
Rees	709	716	71	60	407	26	1.1	1.3
Crefeld	1,625	1,397	128	75	1,194	114	1.6	1.3
Duisburg	695	573	88	51	495	23	2.4	1.3
Moers	795	736	9	17	485	22	2.6	1.5
Kempen	1,254	1,160	38	33	762	44	1.7	1.5
Gladbach	1,851	1,649	17	11	1,220	74	1.7	1.4
Geldern	691	655	20	18	345	14	1.5	1.1
Total	8,229	7,428	404	287	5,164	335	13.9	10.7

Local districts included in the consular district of Crefeld.	Number illegitimate in 10,000 of still-born.		Immigration into the consular district of Crefeld from all countries.					
			Foreigners naturalized and returned German emigrants renaturalized.		Number who emigrated with consent of the Government.		Number who emigrated without consent of the Government.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Cleve	1	1	10	1	60	43	6	....
Rees	1	½	20	16	18	8	16	....
Crefeld	1	1	67	68	21	6	86	....
Duisburg	1	1	8	10	8	1	7	....
Moers	1	½	8	8	15	2	23	....
Kempen	1	1	40	24	8	....	5	....
Gladbach	½	....	40	33	24	9	65	....
Geldern	1	½	20	5	9	5	3	....
Total	7½	5½	213	165	163	74	211	....

Number of inhabitants in the consular district of Crefeld in 1880, *and the total number of births during the year* 1884.

Local districts.	Population, December 1, 1880.			Total births.		Legitimate live-born.		Legitimate still-born.		Illegitimate live-born.		Illegitimate still-born.	
	Males.	Females.	Total.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Cleve	25, 208	25, 324	50, 532	941	864	876	808	33	34	29	19	3	3
Rees	33, 238	30, 534	63, 772	1, 144	1, 136	1, 069	1, 055	39	40	31	39	5	2
Crefeld*	50, 949	54, 672	†105, 621	2, 612	2, 358	2, 429	2, 157	86	73	91	122	6	6
Duisburg	20, 998	20, 244	41, 244	1, 127	1, 078	1, 088	1, 025	51	27	36	25	2	1
Moers	32, 194	31, 402	63, 596	1, 275	1, 124	1, 141	1, 050	84	49	47	23	3	2
Kempen	45, 395	45, 159	90, 554	1, 809	1, 785	1, 670	1, 603	78	72	56	56	5	4
Gladbach	61, 065	62, 420	123, 485	2, 784	2, 702	2, 577	2, 522	109	91	77	66	3	....
Geldern	26, 521	26, 253	52, 774	997	908	937	852	40	29	18	21	2	1
Total	295, 568	296, 008	591, 576	12, 689	11, 900	11, 787	11, 072	520	415	385	371	29	19

* Born in public institutions, 3.

† Present population about 120,000.

HAMBURG.

REPORT OF CONSUL LANG.

Precise statistical account of the number of emigrants departing from Hamburg to foreign ports has been kept since the year 1826, but no emigration office or bureau, whose duty it was to take in hand and control all matters and subjects relating to emigration, was established until the year 1874. Notwithstanding every effort is made to have all statements relating to emigration as accurate as possible, yet errors and inaccuracies frequently occur, principally traceable to erroneous statements made by the emigrants themselves. The time between their arrival and departure is too short to admit of extended inquiry.

The subjoined tables contain the official reports compiled at the emigration office in Hamburg. From these reports it will be seen that a large number of those who have emigrated by the way of Hamburg have refused to make declaration of their profession or avocation.

From 1879 to 1883 the number reached 33,143 persons, or 23.1 per cent. of the total emigration. It will therefore be impossible to give a correct statement of the emigration as to their callings and professions. Among those refusing to give full and correct information to Government officials are embraced the worst elements, the criminals and refugees from justice. The better and more substantial persons who emigrate make no hesitancy in furnishing full and satisfactory information.

During the year 1884 (to this date Government statistics have been published) there have been conveyed from Hamburg to different foreign ports 91,603 emigrants. Comparing this number with the number conveyed in 1883, there is an increase of 2.39 per cent.

Emigrants conveyed—	1884.	1883.	Increase +; decrease —.
			Per cent.
Direct	76, 264	76, 200	— 1. 23
Indirect	15, 339	13, 265	+23. 19
Total	91, 603	89, 465	+ 2. 39

The greatest number of emigrants went to the United States.

CAUSES OF EMIGRATION.

The inclosed statistical tables show that the emigration by way of Hamburg for the year 1884 numbered 49,985 souls of German birth. This is a large number of people, and it is not unnatural to inquire why so many choose to leave their native land. The causes are to be found in the social conditions of the German population. The chief reason which influences so many, and especially those elements which are not impoverished but may be considered the most energetic, to seek their fortunes in new lands, is overpopulation. Another cause can be traced to that old roving spirit of the Germans, which has carried thousands across the seas to improve their fortunes, and has established German habits and customs upon so many distant soils. This class, too, are by no means needy.

While we speak of overpopulation as a cause and principal factor in producing emigration, it must be observed that the most densely populated districts do not furnish the largest number of emigrants. Two things are to be considered, population and the natural resources of the country. The centers of the densest population are also the centers of the most active commerce and industry, where the resources afford a greater multiplicity of employment.

Even in purely agricultural districts, thinly populated, there appears an overpopulation, for the lands are held by comparatively few, and with the exception of the denizens of the cities and towns, the population is employed as day-laborers, small tenants, and help upon lands that do not belong to them and which they never can hope to acquire.

The largest contingent of emigration is drawn from the agricultural class. This is demonstrated in the case of Pomerania, the thinnest populated province of Prussia, yet it furnishes the largest number of emigrants, as is exhibited by inclosed table.

In Pomerania the lands are in the hands of large land-owners. The condition of the tenants and day-laborers are not unlike those of Ireland, where the population diminished during the period of 1845 to 1880 from 8,295,000 to 5,160,000, mainly through emigration.

The decrease by emigration from Pomerania is not so large as that from Ireland, but approaches nearer these figures than any other German province.

Before the year 1885 the two western provinces of Prussia furnished a larger quota of emigrants than the six eastern, but since that period the contingent of emigration from the eastern provinces has been greater than from the western.

The movement of the tides of emigration has been from the west to the east. This no doubt is due to the development of Rhenish and Westphalian industries, which have furnished new employments to thousands of persons who would have emigrated, but have found in their homes the means of earning a livelihood.

The new Prussian territories, Schleswig-Holstein, Hanover, and Hesse-Nassau, put forth a very large emigration for a few years after 1866, and though it has diminished to some extent, it is still large, embracing a greater average than the other provinces.

Political conditions have exerted some influence in promoting emigration. Doubtless many persons decided to leave their native homes through fear of the social consequences wrought by apprehended political disturbances and threatening wars, but the main and principal cause is to be found in the condition of the agricultural classes.

CHARACTER OF THE EMIGRATION.

Bavaria, an almost entirely agricultural state, shows less emigration than any other state, which is quite certainly due to the fact that the condition of the small farmers is more favorable and their prosperity more pleasing in Bavaria than elsewhere in Germany.

The lands in Bavaria are parceled out in small properties to freeholders; large entails do not exist, and the consequence is that the farmers are content, and unfavorable to leaving their native land with all its endearments.

Of the whole emigration, 21.9 per cent. are from the rural districts. The percentage, though large, can be easily accounted for. Not only the small farmers but also the agricultural day-laborers and servants, as well as agricultural artisans and mechanics, are included in these computations. Those constituting this class are the best fitted and adapted to colonize new countries, but they, more than all others, are urged by a direct wish and an implacable desire to become landowners. They compare their position in the old country to that of their own masters, and go willingly to a country that offers them a hope, through diligence, perseverance, and patient labor, to acquire a home with like comforts of those of their masters. If this be not their sole aim, the higher wages paid agricultural laborers in the United States tempts thousands to try their fortunes in America.

This class of emigrants is the most beneficial to the new countries awaiting development, and it is therefore favorable to the United States that it constitutes such a large proportion of German emigration.

Persons belonging to the scientific professions and to commercial pursuits have not the same inducements to seek homes and employment in new countries as those engaged in agricultural pursuits; the prospects for ready engagement are not so favorable to them. If in their country trade and commerce are depressed, to them there is a hope left that a change may take place and trade and prosperity may be revived. To the tillers of the soil no anticipations of a brighter future can be entertained; the lands are fully developed and occupied, and overburdened with teeming, patient laborers. The only bow of promise to them is in emigrating to more inviting fields. Here is a reason for so large annual outpouring of the German agricultural population.

EMIGRATION IS VOLUNTARY.

The emigration from Germany is voluntary. By a law passed June 1, 1870, all persons who choose to do so can emigrate in times of peace except those who have not yet fulfilled their duty as citizens in respect to military service.

Under the compulsory system of military service every able-bodied male inhabitant of the Empire must serve three years, but under some circumstances this period may be reduced to one year. All those actively engaged in the army and navy and those belonging to the reserve (*Landwehr*), and all persons between the ages of seventeen and twenty-five years who have not produced testimony that they are not emigrating to avoid military service, are forbidden from emigrating by the fifteenth article of the emigration law.

The penalty inflicted for a violation of this law, when recaptured, and convicted, is a fine not less than 150 nor more than 1,000 marks, or imprisonment from one to twelve months.

Persons who are free from military service are permitted to leave the country.

No passport or certificate of citizenship is granted. Ten years' voluntary absence forfeits all rights and privileges of citizenship. The greater part of the emigrants are free of military service, yet there are some who owe military duty and seek to evade it by emigrating.

It would be difficult to ascertain the correct number, as the statistics can only be obtained through the list of military deserters, which is not made public, but it is estimated that the desertions from military service by emigration numbered 10,690, of which 4,503 were agricultural laborers.

The Government neither favors nor restrains emigration; all its ordinances on the subject look only to the welfare and kind treatment which shall be extended to them on their journey. It was indeed a long time before the Government arrived at this wise conclusion. Prohibitive measures were tried and proved void of results. It would be impossible to check the tide of emigration without presenting through the industrial pursuits a more favoring prospect of a coming prosperity.

Another cause promotive of emigration is found in the *Socialistengesetz* (Socialistic law). This law was enacted by the force of public sentiment aggravated by the two attempts on the life of the venerable Emperor William, and deprives many, on account of their political opinions, of their privileges, and relegates them to the administrative power of the police. Under the provisions of this law a person who is suspected of Socialistic views may be banished from the city where he lives. Also by this law certain cities are placed partially under martial law, viz, Berlin, Hamburg, Leipsic, Chemnitz, and more recently Spremberg.

As other German states pursue a like course the Socialist finds himself forced to seek shelter and home in some other country. The greater number of Socialists who have emigrated have gone directly to the United States. This may be stated as the only way in which the German Government exerts an influence which would encourage emigration, and if it does this, it is indirectly.

Criminals are never banished; on the contrary, they are forbidden to leave the country until they have suffered the penalty which the law inflicts. If they escape, every effort is made to recapture them. Banishment has never been adopted by the German Government as a method of riddance of the mischievous and turbulent elements of society; even penal settlements have ever been repulsive to the ideas of the Imperial Parliament. As the bulk of German emigration goes to the United States, so also the majority of the criminals and refuse of society that leave the country find their way there.

The freedom of our republican form of Government, the liberty of the press, and the right to hold public assemblies have proved to be a congenial encouragement to Socialistic agitators.

An opinion prevails that leading members of the German Socialistic party are going to the United States for the purpose of consolidating and molding into one solid, compact party the German Socialists who have heretofore emigrated there, and who are now acting in a separate and unorganized way. A natural sequence of the unmolested condition of the Socialists in America as compared with their condition in Europe, and detailed in their letters from banished co-laborers in the cause in America, is thought to be the leading reason for the large exodus of Socialists from the states of Europe to the United States.

Anarchists are merely the radical elements of the Socialistic party. Every true Social-Democrat will become an Anarchist if he follows the rules, precepts, ideas, and teachings of his party. Socialism is the blossom and anarchy is the fruit from seed sown by Barleau, Lasalle, Marx, and other eminent Social-Democrats. The strict police regulations of the German Government suppress Anarchism by sheer force, but it may be a question pregnant with alarm that two-thirds of the Social-Democrats who have and are emigrating to the United States may not grow step by step under our free institutions more and more radical in their views and demands, thus becoming Anarchists and the disturbers of the peace and order of society.

A deportation of paupers is never practiced by the Government. The emigrants are by no means wealthy, or in many instances not even well-to-do citizens, but are not paupers. They have money enough to pay their passage, and not infrequently a sum to aid them in making a commencement in their new home. Large numbers are induced to go over by friends who have settled in America and have succeeded, and they often assist them by sending a prepaid passage ticket.

The emigrants from the northern districts of Germany, Schleswig-Holstein, Hanover, Mecklenburg, Lubeck, and the Hamburg territory are sober, steady, patient, and industrious people. They live plainly, having no pretensions in regard to the style of their houses or their modes of living and dressing. They expect to find a remuneration for hard labor such as they are accustomed to, better living, and more agreeable conditions of life than they leave. Such persons are rarely disappointed; they are generally contented and become valuable citizens.

Religious proscriptions cannot be stated as a cause of emigration. Nearly all the states of Germany recognize a state church, yet all creeds of religious faith enjoy equal rights and privileges in worshiping. It has ever been a prominent feature in the Hamburg Government to tolerate the largest religious liberty. The recent anti-Semitic movement may have induced a few Israelites to leave the country, but as the prosecution has been confined to a few individuals, it has not and cannot be assigned as a cause producing emigration.

Insane persons are only allowed to emigrate in company with their relatives and guardians. The strictest regulations are observed to prevent the escape of unfortunate lunatics, who under the authorities must be taken care of either in private asylums or in the Government sanitariums, which are model institutions of their kind.

Neither in Hamburg nor in the German Empire is emigration considered as a fit or lawful method of ridding the country of the obnoxious elements of the population.

There is no such thing as assisted emigration by the German Government, but by some foreign Governments, especially some of the South American states, which fully realize the value and importance of the introduction of a laboring population, which with favoring conditions would develop into the best and most useful citizens.

The efforts of these states to turn the channels of emigration from the United States have proven of little or no consequence. The only instances of assisted emigration from Germany are those of some member or members of a family whose course of life would reflect dishonor to the family's name and social standing; to avoid this the relatives or friends ship him or them to the United States. The matter-of-fact modes of life in our country, the dire necessity of working for a livelihood, the non-consideration of their former social advantages and privileges by the people, often put such persons upon their mettle, and the best characteristics of good citizenship are not infrequently brought out. When this is not the case these persons become chronic growlers, join the bands of disaffected, and become Anarchists and disturbers of order and social quietude. From my knowledge of the character of German emigrants that have settled in the United States the good largely predominates. Of course where there is much light there must be some shadow.

Among the German element of our population there are to be found many eminent and praiseworthy features that would honor and embellish the citizenship of any country. It is true, there have been some importations whose conduct would naturally array in hostility the sentiment of all good and just people, but we have the consoling reflection that by the force of sound and just administration of public opinion all disturbances produced by such persons will be quickly stamped out and the actors consigned to an ignominious oblivion.

The only method which suggests itself to my mind for limiting and restricting emigration to the United States is to place it under consular inspection at the port of embarkation. Let the vessels understand that they will not be allowed to land emigrants who have not passed the inspection of the consular officer of the port from whence the ship sails and who do not bear his certificate of inspection. This inspection should embrace healthfulness, physical condition to earn a living, ability to support themselves until employment could be obtained, character for honesty and industry and obedience to law, &c.

WM. W. LANG,
Consul.

UNITED STATES CONSULATE,
Hamburg, June 16, 1886.

Destination of emigrants conveyed via Hamburg in the year 1884.

Native place (home).	Destination.																										Total both sexes.
	United States of America.		British North America.		Central America and Mexico.		West Indies.		Brazil.		Argentine Republic.		Peru.		Chili.		Other South American states.		Africa.		Asia.		Australia.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Eastern Prussia	506	346	4	6	...	...	...	...	3	...	5	...	...	...	1	1	4	...	3	1	...	...	4	1	529	355	884
Western Prussia	2,525	2,044	83	67	...	...	...	...	2	2	2	...	...	...	2	1	2	...	2	...	1	...	6	1	2,624	2,115	4,739
Brandenburg and Berlin	2,327	1,768	18	9	3	1	3	...	29	16	22	6	2	...	56	36	23	6	19	6	2	...	54	3	2,583	1,879	4,462
Pomerania	3,084	2,725	156	152	...	...	...	...	18	5	15	5	...	...	5	...	2	...	4	1	...	...	15	4	3,294	2,892	6,186
Posen	2,923	2,212	51	30	1	...	...	...	4	5	13	1	...	...	1	1	...	...	3	...	...	...	10	3	3,007	2,252	5,259
Silesia	1,256	844	11	9	...	...	1	...	43	28	9	3	4	...	10	9	8	2	13	...	...	...	20	14	1,375	909	2,284
Saxony (Prussian)	695	402	29	20	2	...	...	...	44	14	3	2	1	...	11	4	2	1	2	...	1	...	31	14	821	457	1,278
Schleswig-Holstein	3,979	3,091	15	19	5	...	2	...	37	28	80	47	1	1	14	11	18	13	20	11	2	1	53	35	4,226	3,257	7,483
Hanover	948	658	1	1	6	...	...	...	32	5	17	4	6	6	10	2	4	...	12	8	2	...	47	26	1,085	705	1,790
Westphalia	143	75	...	...	1	...	...	...	6	3	14	4	...	...	3	...	1	12	3	1	...	...	9	1	180	96	276
Hesse-Nassau	418	304	2	8	...	...	...	...	5	2	6	7	3	2	17	7	...	...	12	9	...	...	13	4	476	343	819
Rhenish Prussia	196	116	4	4	2	...	...	...	17	7	8	4	...	...	3	1	4	3	7	1	2	...	10	4	253	140	393
Hohenzollern	26	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26	16	42
Total from Prussia	19,055	14,601	369	325	20	1	6	...	253	115	194	83	17	9	183	73	68	37	100	33	10	1	272	138	20,479	15,416	35,895
Bavaria (right of Rhine)	1,466	1,012	8	3	1	...	...	...	6	8	4	...	3	...	...	...	1	...	6	1	...	...	12	2	1,507	1,026	2,533
Bavarian Pfalz (Palatinate)	7	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	9	5	14
Saxony	926	520	2	...	2	...	...	...	27	9	11	5	...	...	11	4	9	1	10	3	...	...	16	3	1,014	545	1,559
Wurtemberg	959	705	1	1	2	...	...	...	11	2	4	1	1	...	4	2	...	...	3	2	1	...	14	9	1,000	722	1,722
Baden	283	197	1	...	3	...	...	...	6	4	5	1	...	...	2	1	3	1	...	...	...	...	4	3	307	207	514
Hesse	340	253	...	...	...	...	...	...	8	7	2	...	...	...	...	...	...	...	1	2	...	...	2	3	353	265	618
Mecklenburg Schwerin	1,719	1,416	2	4	1	...	1	...	6	3	7	3	3	1	4	...	6	5	4	...	1	...	15	3	1,769	1,435	3,204
Saxe-Weimar	90	55	1	...	...	...	...	...	6	3	...	...	...	...	1	...	1	...	...	...	...	...	...	...	99	58	157
Mecklenburg-Strelitz	240	222	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	241	222	463
Oldenburg	50	43	...	...	...	...	...	...	3	2	...	...	2	...	2	2	2	2	2	...	1	2	1	...	62	49	111
Brunswick	80	50	2	1	...	...	...	...	3	1	1	...	1	...	3	2	3	2	1	1	1	...	7	4	100	59	159
Saxe-Meiningen	39	27	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2	...	43	27	70
Saxe-Altenburg	30	17	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	32	18	50
Saxe-Coburg Gotha	33	18	2	...	...	...	...	...	1	1	...	...	...	...	1	...	1	...	...	1	...	...	3	1	40	21	61
Anhalt	35	31	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	...	...	...	1	...	38	32	70
Schwarzburg-Sondershausen	14	3	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	3	18
Schwarzburg-Rudolstadt	22	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	24	13	37
Waldeck	2	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	2	5

Destination of emigrants conveyed via Hamburg in the year 1884—Continued.

Native place (home).	Destination. United States of America.		British North America.		Central America and Mexico.		West Indies.		Brazil.		Argentine Republic.		Peru.		Chili.		Other South American states.		Africa.		Asia.		Australia.		Total.		Total both sexes.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Reuss, ältere Linie	8	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	...	8
Reuss, jüngere Linie	42	16	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...	1	...	1	...	48	16	64
Schaumburg-Lippe	4	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	5	2	7
Lippe	8	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	10	...	10
Lubeck	94	71	1	...	1	...	...	...	2	...	...	...	2	...	...	1	4	...	...	...	...	...	5	2	109	74	183
Bremen	38	27	1	...	1	...	3	...	3	1	6	...	2	...	2	1	5	2	4	2	3	...	3	1	71	34	105
Hamburg	999	835	3	1	5	1	9	...	43	25	40	11	10	7	36	21	46	27	30	20	12	2	61	56	1,294	1,006	2,300
Alsace-Lorraine	23	24	...	...	1	...	...	...	2	1	1	...	...	...	...	...	...	...	1	...	...	...	...	...	28	25	53
Total from Germany	26,601	20,163	393	335	87	2	20	...	367	183	281	106	42	17	199	108	145	78	165	65	30	5	423	225	28,703	21,282	49,985
Austria	4,106	2,058	10	9	1	...	...	...	177	118	8	3	8	...	1	1	3	...	2	...	...	...	5	4	4,321	2,193	6,514
Bohemia	2,550	2,049	20	17	...	...	...	...	28	10	1	2	1	...	2	2	...	...	1	...	...	...	7	3	2,609	2,083	4,692
Hungary	5,703	2,125	18	8	...	...	...	...	10	8	5	3	...	...	...	...	2	...	1	2	...	...	...	...	5,739	2,146	7,885
Switzerland	31	8	...	...	...	...	...	...	3	4	4	...	1	...	2	...	2	...	3	...	2	...	1	...	49	12	61
Denmark	1,322	676	5	1	...	...	10	3	7	3	26	7	2	2	2	...	1	...	7	2	1	1	30	9	1,413	704	2,117
Sweden	382	167	1	...	...	...	...	...	4	...	8	...	...	...	2	...	5	3	1	...	...	1	14	10	417	181	598
Norway	292	143	...	...	...	...	...	...	1	1	...	...	...	...	3	4	1	...	1	...	...	...	9	7	307	155	462
Luxemburg	...	...	...	...	...	...	...	...	...	...	4	1	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5
France	6	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	...	...	...	...	...	15	4	19
Roumania	544	407	55	16	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	600	423	1,023
Servia	6	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	4	10
Belgium	7	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	8	5	13
Holland	10	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	10	2	...	...	22	10	32
Greece	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Great Britain	24	4	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	...	2	...	...	...	1	...	29	5	34
Prussia and Poland	9,865	4,404	23	18	...	...	...	...	3	2	15	8	...	...	...	...	2	3	56	5	...	2	14	3	9,978	445	10,423
Italy	74	11	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	77	11	88
Montenegro	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3
Spain	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4

Turkey	16	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	16	....	16
Bulgaria	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	2	3
Total from European states	51,543	32,239	525	404	38	2	31	3	603	331	352	130	54	19	212	116	163	79	251	74	43	11	504	261	54,319	33,669	87,988
United States of America	1,847	1,100	3	....	....	....	....	....	1	....	1	....	....	....	2	....	3	....	3	1	....	....	5	3	1,865	1,104	2,969
British North America	9	4	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10	6	16
Mexico and Central America	6	3	....	....	4	1	....	....	....	....	....	....	....	....	....	1	3	....	....	....	....	....	....	....	13	5	18
West Indies	15	13	....	....	....	....	9	1	....	....	....	....	....	....	....	....	2	1	....	....	....	....	....	....	26	15	41
Brazil	5	4	....	....	....	....	1	....	103	99	2	....	....	....	....	....	2	2	....	....	....	....	....	....	113	105	218
Argentine Republic	2	....	....	....	....	....	....	....	1	....	63	47	....	....	....	....	1	....	....	....	....	....	2	....	69	47	116
Peru	....	....	....	....	....	....	....	....	....	....	....	....	7	8	....	....	....	....	....	....	....	....	....	....	7	8	15
Chili	....	....	....	....	....	....	....	....	....	....	1	....	....	1	24	10	....	....	....	....	....	....	....	....	25	11	36
Other South American states	11	6	....	....	....	....	....	....	....	....	2	....	1	....	....	....	14	9	....	....	....	....	....	....	28	15	43
Africa	2	1	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	25	15	....	....	....	....	29	16	45
Asia	22	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	41	12	1	....	64	13	77
Australia	4	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	41	2	18	3	21
Total	53,466	33,372	529	406	42	3	41	4	709	430	422	177	62	28	238	127	188	91	279	90	84	23	526	206	56,586	35,017	91,603

RECAPITULATION.

Kingdom of Prussia	19,055	14,601	369	325	20	1	6	....	235	115	194	83	17	9	133	73	68	37	100	33	10	1	272	138	20,479	15,416	35,895
Germany	7,546	5,562	24	10	17	1	14	....	132	68	87	23	25	8	66	35	77	36	65	23	20	4	151	87	8,224	5,866	14,090
European states	24,942	12,076	132	69	1	....	11	3	236	148	71	24	12	2	13	8	18	6	86	9	13	6	81	36	25,616	12,387	38,003
Non-European states	1,932	1,133	4	2	4	1	10	1	106	99	70	47	8	9	26	11	25	12	28	16	41	12	25	5	2,267	1,348	3,615
Total	53,466	33,372	529	406	42	3	41	4	709	430	422	177	62	28	238	127	188	91	279	90	84	23	526	206	56,586	35,617	91,603

Number of vessels, and their destination, by which emigrants were conveyed direct from Hamburg in 1884.

Destination.	Emigrants.	Steamships.	Sailing-vessels.
New York	71, 805	116	....
Brazil	1, 014	15	....
La Plata states	520	12	....
West coast of South America	56	2	....
Australia	708	9	....
Various transatlantic ports	1, 161	126	27
	75, 264	280	27

Direct from Hamburg to—	1884.		1883.	
	Vessels.	Passengers.	Vessels.	Passengers.
United States	116	71, 805	105	78, 827
Brazil	15	1, 014	12	1, 145
La Plata states	12	520	9	343
Chili	2	56	3	91
West Indies	....	....	1	34
Africa	....	....	6	619
Australia	9	708	10	1, 085
Various transatlantic ports on vessels not intended for passenger traffic	....	1, 161	....	1, 059
	154	75, 264	146	76, 200
Indirectly conveyed	....	16, 339	....	13, 205
Total	....	91, 603	....	89, 465

Emigrants conveyed via Hamburg in each month during the years 1883 *and* 1884.

Month.	1884.					Total 1883.
	Conveyed direct by—		Total conveyed direct.	Indirectly conveyed.	Total.	
	Packet ships.	Ships carrying less than 25 passengers.				
January	8, 082	120	8, 202	604	3, 806	2, 632
February	5, 164	86	5, 250	650	5, 900	4, 002
March	9, 027	74	9, 101	2, 347	11, 448	6, 698
April	11, 256	66	11, 822	2, 468	13, 790	12, 815
May	10, 446	51	10, 497	4, 338	14, 835	12, 637
June	6, 424	97	6, 521	1, 125	7, 646	7, 837
July	9, 268	105	6, 373	1, 078	7, 451	6, 692
August	5, 694	143	5, 837	1, 183	7, 020	6, 869
September	4, 839	87	4, 926	733	5, 659	7, 835
October	6, 694	121	6, 815	730	7, 545	11, 074
November	3, 865	106	3, 971	743	4, 714	6, 806
December	1, 344	105	1, 449	340	1, 789	3, 568
Total	74, 103	1, 161	75, 264	16, 339	91, 603	89, 465

Sex and age of emigrants conveyed, direct and indirect, from Hamburg to foreign ports during the years 1883 *and* 1884.

Year.	Adults.		Total adults.	Children.		Total.
	Male.	Female.		Less than 10 years.	Less than 1 year.	
Conveyed direct:						
1884	44,681	30,408	56,489	14,009	4,631	75,264
1883	44,678	30,463	55,748	14,289	5,104	75,141
Conveyed indirect:						
1884	11,725	4,614	13,894	1,890	555	16,339
1883	9,203	3,972	11,041	1,832	392	13,265

Emigrants conveyed from various European ports to transatlantic places in 1883 *and* 1884.

Conveyed from—	1884.	1883.
Hamburg	91,603	89,465
Bremen	103,121	111,295
Stettin	773	548
Antwerp	28,616	34,480
Havre	21,634	25,502
Great Britain and Ireland	303,901	391,157

Emigrants conveyed from Hamburg to transatlantic ports since 1846.

Year.	Direct, by—		Total direct.	Indirect.	Grand total.
	Emigrant vessels.	Other vessels.			
1846	4,857	....	4,857	....	4,857
1847	7,628	....	7,628	....	7,628
1848	6,585	....	6,585	....	6,585
1849	5,620	....	5,620	....	5,620
1850	7,295	135	7,430	....	7,430
1851	12,095	184	12,279	....	12,279
1852	21,345	571	21,916	7,119	29,035
1853	18,585	384	18,969	10,511	29,480
1854	31,753	557	32,310	18,509	50,819
1855	15,226	437	15,663	2,989	18,652
1856	23,822	464	24,286	1,917	26,203
1857	28,568	326	28,894	2,672	31,566
1858	18,473	349	18,822	977	19,799
1859	12,534	219	12,753	489	13,242
1860	14,690	223	14,913	1,302	16,215
1861	13,540	184	13,724	675	14,399
1862	18,373	187	18,560	1,517	20,077
1863	21,866	194	22,060	2,621	24,681
1864	19,744	213	19,957	5,098	25,055
1865	36,878	334	37,212	5,672	42,884
1866	38,627	413	39,040	5,740	44,780
1867	37,872	298	38,170	4,675	42,845
1868	43,505	123	43,628	6,442	50,050
1869	41,217	207	41,424	5,870	47,294
1870	27,392	50	27,442	5,114	32,556
1871	34,639	504	35,143	7,081	42,224
1872	52,828	395	53,223	21,183	74,406
1873	44,278	300	44,578	24,598	69,176
1874	30,152	473	30,625	12,818	43,443
1875	21,561	377	21,938	9,872	31,810
1876	20,615	564	21,179	7,554	28,733
1877	18,573	427	19,000	3,570	22,570
1878	19,932	514	20,446	4,357	24,803
1879	17,030	775	17,805	7,059	24,864
1880	48,359	741	49,100	19,787	68,887
1881	74,400	1,119	75,519	47,612	123,131
1882	80,993	1,100	82,093	31,128	113,221
1883	75,141	1,059	76,200	13,265	89,465
1884	74,103	1,161	75,264	16,339	91,603
Total	1,140,694	15,561	1,156,225	316,112	1,472,367

Ages of emigrants (Germans) conveyed via Hamburg to foreign ports from 1874 *to* 1883.

Year.	Less than 1 year.	1 to 5 years.	5 to 15 years.	15 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 60 years.	60 years and above.	Between the ages of 15 and 60.	
									Total.	Percentage.
1874	2,671	3,566	7,580	5,981	11,776	6,089	5,166	614	29,012	66.8
1875	1,602	2,578	5,150	4,408	8,920	4,738	3,933	481	21,999	69.2
1876	1,682	2,197	4,515	3,710	8,366	4,456	3,396	411	19,928	69.8
1877	1,219	1,824	3,287	3,049	6,791	3,532	2,251	356	15,884	70.4
1878	1,397	1,921	3,486	3,643	7,382	3,797	2,757	420	15,579	70.9
1879	1,242	1,602	3,093	3,780	8,595	3,700	2,553	299	18,628	74.9
1880	4,273	5,105	8,924	9,704	23,085	10,307	6,673	816	49,769	72.2
1881	8,797	10,836	16,605	14,968	39,959	19,035	11,546	1,385	85,508	69.4
1882	7,889	8,482	15,884	15,271	36,910	17,420	11,024	1,384	80,625	71.2
1883	5,506	6,752	12,496	12,367	28,833	13,114	9,250	1,147	63,564	71.0
Total	35,775	44,823	80,520	76,881	180,617	86,179	58,819	7,313	402,496	70.5
Percentage	6.3	7.6	14.0	13.5	31.6	15.1	10.3	1.3	70.5	....

Professions of emigrants conveyed from Hamburg, 1879 *to* 1883.

Profession.	1879.	1880.	1881.	1882.	1883.	Total.
Agriculture, fishery, and forestry	5,654	13,761	20,555	19,656	14,648	74,274
Other industries	4,602	14,132	18,912	15,900	12,191	65,737
Commerce	4,033	7,377	7,941	7,669	5,814	32,834
Workmen without distinct calling	3,869	16,330	46,029	39,186	30,848	35,762
Different trades	1,223	2,074	2,529	2,627	2,215	10,668
Laborers without any profession	195	349	339	315	203	1,069
Profession not declared	5,788	14,864	26,862	27,868	23,548	98,394
Total	24,864	68,887	123,131	113,221	89,465	319,564

ITALY.

ROME.

REPORT OF CONSUL-GENERAL ALDEN.

In compliance with the instructions contained in the Department circular dated April 27, 1886, I have the honor to report the following facts relating to emigration to the United States from this consular district, and also from the Kingdom of Italy to the United States, from 1876 to 1885, so far as they can be obtained.

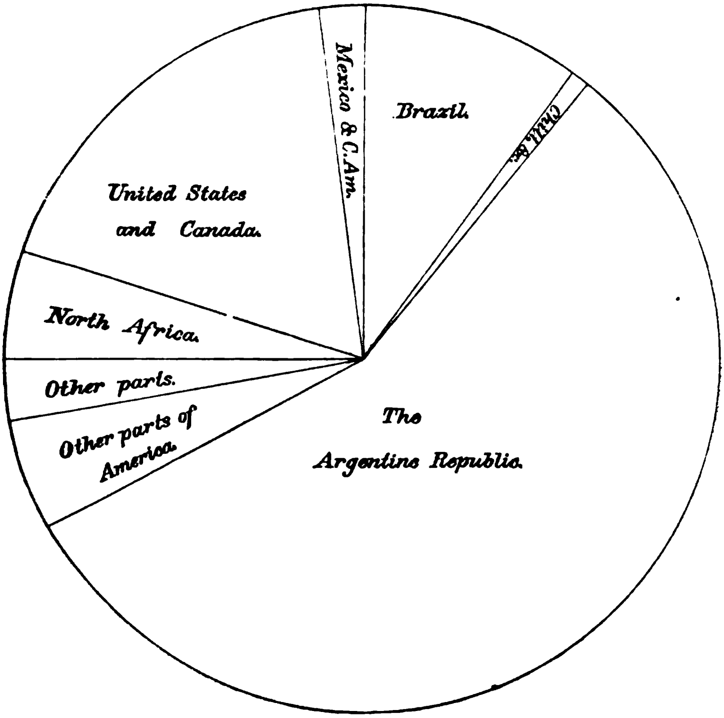
No statistics prior to 1876 can be obtained, for the reason that a different system of registry was adopted beginning with that year.

I may here remark that the area covered by the consular district of Rome is roughly estimated to include nine of the sixty-nine provinces making up the Kingdom of Italy; this district may also be roughly estimated to cover 17,398 square miles, having a population of 3,500,000 inhabitants.

Emigrants are divided by Italian statisticians into two kinds, namely, permanent and temporary, the latter consisting of persons who leave the country for a period less than a year for travel or to seek work in other countries. This classification is made according to replies given to the passport officials, but is not accurate, as the object of the inquiries is not always understood, besides there is a certain number of emigrants without passports.

According to the official statement of the Bureau of Statistics, the total number of emigrants from the consular district of Rome (as nearly

DISTRIBUTION OF EMIGRATION FROM ITALY IN 1884.



as this district can be defined for statistical purposes to the United States from 1876 to 1885, was as follows:

Year.	Total number of emigrants.	Year.	Total number of emigrants.
1876	15	1881	324
1877	2	1882	561
1878	30	1883	531
1879	42	1884	178
1880	80	1885	[illegible]6

The diminution in 1884 in this district, as well as in other parts of Italy, was owing to the cholera epidemic.

Emigrants according to sex from the consular district of Rome to the United States, from 1876 to 1885.

Years.	Permanent.			Temporary.			Grand total.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1876	6	2	8	7	....	7	13	2	15
1877	....	....	....	2	......	2	2	....	2
1878	....	....	....	18	12	30	18	12	30
1879	24	11	35	2	5	7	26	16	42
1880	31	3	34	44	2	46	75	5	80
1881	204	32	236	75	13	88	279	45	324
1882	514	24	538	23	....	23	537	24	561
1883	427	25	452	68	11	79	495	36	532
1884	135	20	155	19	4	23	154	24	178
1885	188	49	237	78	11	89	266	60	326

Occupations of emigrants from the consular district of Rome to the United States between 1882 and 1885.

[Proportion for every 100 emigrants.]

Occupations.	Years.			
	1882.	1883.	1884.	1885.
Husbandmen, peasants, and shepherds	67.91	47.73	67.43	62.58
Masons and stone-cutters	3.04	3.59	5.06	2.45
Navvies, porters, and other day laborers	13.37	36.41	11.80	11.35
Artisans and operatives	7.84	7.92	10.11	15.34
Business men and manufacturers	1.07	0.57	1.12	1.23
Liberal professions	0.89	0.38	1.12	0.61
Servants	0.35	0.38	0.56	0.92
All other professions	5.53	3.02	2.80	5.52
	100.00	100.00	100.00	100.00

Emigrants from Italy to the United States from 1882 *to* 1885.

Districts.	1882.			1883.			1884.			1885.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Permanent emigration:												
Piedmont	246	93	309	305	85	390	486	138	624	516	141	657
Liguria	416	192	609	653	434	1,087	384	210	594	447	172	619
Lombardy	610	262	872	549	99	648	308	106	414	223	114	337
Venetia	7	4	11	25	7	32	26	16	42	113	98	211
Emilia	23	13	36	107	78	185	103	53	156	127	34	161
Tuscany	316	20	336	453	62	515	160	39	199	166	54	220
Marches	5	2	7	11	3	14	88	1	39	14	2	16
Umbria	5	2	7	4	2	6	5	......	5	......	....	......
Latium	......	......	......	......	......	......	......	......	......	......	1	1
Abruzzi and Molise	2,881	120	2,501	3,680	145	3,825	699	145	844	1,061	223	1,284
Campania	6,151	1,115	7,266	5,795	887	6,682	1,679	628	2,307	1,641	833	2,474
Puglie	62	8	70	253	260	7	91	23	114	79	10	89
Basilicata	2,269	564	2,833	2,008	507	2,515	1,666	773	2,439	2,346	1,115	3,461
Calabria	1,693	168	1,861	1,884	128	2,012	665	155	820	874	244	1,118
Sicily	789	289	1,079	1,269	465	1,734	987	382	1,369	736	364	1,100
Sardinia	......	......	......	......	......	......	....	......	....	......	......	......
Total	14,973	2,822	17,795	16,996	3,165	20,161	7,297	2,669	9,966	8,346	3,405	11,751
Temporary emigration:												
Piedmont	6	5	11	6	9	15	9	......	9	85	25	110
Liguria	105	43	148	22	11	33	33	19	52	57	15	72
Lombardy	35	5	40	83	47	130	47	13	60	39	9	48
Venetia	6	......	6	12	.....	12	9	.....	9	14	4	18
Emilia	11	.....	11	40	13	53	25	......	25	10	4	14
Tuscany	2	.....	2	34	5	39	19	9	28	40	4	44
Marches	......	......	......	14	3	17	1	......	1	......	......	......
Umbria	2	......	2	1	1	2	2	2	4	1	.... .	1
Latium	......	......	......	......	......	......	1	1	2	......	......	......
Abruzzi and Molise	21	.....	21	67	10	77	15	1	16	77	11	88
Campania	196	18	214	153	8	161	33	12	45	121	53	174
Puglie	18	3	21	24	9	33	78	6	84	7	......	7
Basilicata	197	37	234	476	94	570	85	13	98	2	1	3
Calabria	53	5	58	......	......	......	......	.....	......	34	7	41
Sicily	116	14	130	175	34	209	155	28	183	72	20	92
Sardinia	......	......	......	......	......	....	......	......	......	......	......	......
Total	768	130	898	1,107	244	1,351	512	104	616	559	143	702
Grand total	15,741	2,952	18,693	18,103	3,409	21,512	7,809	2,773	10,612	8,905	3,548	12,453

***Emigrants from Italy to foreign countries from* 1876 *to* 1885.**

Districts.	1876.			1877.			1878.			1879.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Permanent emigration:												
Piedmont	1,919	593	2,542	1,714	781	2,495	1,721	695	2,416	3,657	1,591	5,248
Liguria	1,396	489	1,885	1,659	866	2,525	1,752	822	2,634	2,382	1,194	3,576
Lombardy	3,894	2,861	6,755	1,950	1,222	3,172	1,476	885	2,361	3,003	1,304	4,307
Venetia	1,869	1,364	3,233	4,067	3,470	7,537	2,507	1,924	4,431	3,438	2,626	6,064
Emilia	347	122	469	860	317	1,177	785	243	1,028	972	302	1,274
Tuscany	1,209	168	1,377	791	132	923	822	142	964	1,197	219	1,416
Marches	89	63	152	28	28	56	35	20	55	38	12	50
Umbria	5	2	7	......	......	......	......	......	......	1	1	2
Latium	10	5	15	6	3	9	3	3	6	6	3	9
Abruzzi and Molise	58	26	84	340	79	419	373	93	466	1,498	344	1,842
Campania	918	392	1,310	697	330	1,027	1,015	580	1,601	5,092	1,999	7,091
Puglie	92	85	177	17	11	28	85	17	42	38	37	75
Basilicate	845	161	1,006	701	210	911	1,203	353	1,556	4,002	1,764	5,766
Calabria	470	60	530	350	55	405	347	62	409	2,975	580	3,555
Sicily	111	96	207	229	173	402	327	227	554	331	215	546
Sardinia	6	1	7	......	1	1	7	5	12	2	1	3
Total	13,268	6,488	19,756	13,409	7,678	21,087	12,398	6,137	18,535	28,632	12,192	40,824
Temporary emigration:												
Piedmont	26,461	2,679	29,140	19,579	2,223	21,812	19,786	2,573	22,350	19,752	2,545	22,297
Liguria	1,330	352	1,682	973	276	1,249	728	195	923	1,715	663	2,378
Lombardy	13,338	1,001	14,339	15,442	620	16,062	12,701	532	13,233	11,870	522	12,392
Venetia	29,564	1,751	31,315	25,273	1,719	26,902	24,122	1,936	26,058	24,968	1,763	26,731
Emilia	2,796	142	2,938	2,208	190	2,398	1,927	224	2,151	5,639	420	4,059
Tuscany	4,878	290	5,168	5,157	401	5,558	4,957	416	5,373	6,779	455	7,234
Marches	342	11	353	144	23	167	151	14	165	188	26	214
Umbria	51	2	53	23	5	28	11	2	13	17	3	20
Latium	160	49	209	4	1	5	7	......	7	7	6	13
Abruzzi and Molise	269	22	291	128	27	155	818	152	970	264	56	320
Campania	1,476	379	1,855	1,414	450	1,864	2,117	769	2,886	1,607	675	2,282
Puglie	157	5	162	256	121	377	324	137	461	307	176	483
Basilicata	64	32	96	176	38	214	603	282	885	......	......	......
Calabria	301	71	372	716	145	861	1,455	279	1,734	158	64	222
Sicily	712	309	1,021	281	84	365	402	109	511	261	81	342
Sardinia	20	1	21	16	3	19	3	1	4	8	12	20
Total	81,919	7,096	89,015	71,790	6,336	78,126	70,112	7,621	77,733	71,540	7,467	79,007
Grand total	95,187	13,584	108,771	85,199	14,014	97,213	82,510	13,758	96,268	100,172	19,659	119,831

Emigrants from Italy to foreign countries from 1876 *to* 1885—Continued.

Districts.	1880.			1881.			1882.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Permanent emigration:									
Piedmont	3,120	1,471	4,591	4,836	2,182	7,018	5,961	3,147	9,108
Liguria	2,190	1,292	3,482	2,292	1,066	3,358	2,409	1,102	3,511
Lombardy	2,597	1,344	3,941	3,981	1,826	5,507	5,916	2,773	8,689
Venetia	2,262	1,618	3,880	1,429	919	2,878	2,534	1,837	4,371
Emilia	925	280	1,205	963	275	1,238	1,183	405	1,588
Tuscany	1,803	322	2,125	2,195	423	2,618	2,198	436	2,634
Marches	58	34	92	186	27	213	574	40	614
Umbria	3	6	9	15	4	19	11	4	15
Latium	8	7	15	2	1	3	4	1	5
Abruzzi and Molise	1,286	348	1,634	1,796	335	2,131	3,582	301	3,883
Campania	5,980	2,395	8,375	7,100	2,381	9,481	9,834	2,517	12,351
Puglie	28	14	42	27	13	40	116	24	140
Basilicata	2,452	1,722	5,174	3,150	1,161	4,311	5,456	1,532	6,988
Calabria	2,130	592	2,722	1,578	458	2,036	8,378	1,151	9,529
Sicily	443	200	640	637	302	939	1,589	672	2,261
Sardinia	....	4	4	14	3	17	44	17	61
Total	26,285	11,649	37,934	30,201	11,406	41,607	49,789	15,959	65,748
Temporary emigration:									
Piedmont	21,772	3,046	24,815	24,305	3,095	27,400	24,812	4,086	28,898
Liguria	1,406	404	1,810	1,680	355	2,035	2,097	463	2,560
Lombardy	13,196	440	13,636	14,973	445	15,418	18,375	544	18,919
Venetia	27,691	2,089	29,780	29,180	1,679	30,859	30,232	1,761	31,993
Emilia	3,119	301	3,420	4,625	318	4,943	5,173	250	5,422
Tuscany	5,337	434	5,771	6,987	403	7,390	6,229	575	6,744
Marches	158	19	177	126	18	144	99	16	115
Umbria	9	....	9	3	3	6	14	2	16
Latium	2	....	2	1	1	2	....	....	....
Abruzzi and Molise	249	52	301	670	151	821	783	69	852
Campania	852	471	1,323	1,166	323	1,489	1,256	500	1,756
Puglie	288	141	429	240	99	339	430	220	650
Basilicata	7	1	8	458	151	609	662	136	798
Calabria	169	61	230	2,204	311	2,515	940	53	993
Sicily	180	61	241	186	18	204	748	206	954
Sardinia	6	6	12	37	14	51	112	32	144
Total	74,441	7,526	81,967	86,841	7,384	94,225	86,961	8,853	95,814
Grand total	100,726	19,175	119,901	117,042	18,790	135,832	136,750	24,812	161,562

Emigrants from Italy to foreign countries from 1876 *to* 1885—Continued.

Districts.	1883.			1884.			1885.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Permanent emigration:									
Piedmont	4,569	2,024	6,593	6,751	2,096	8,847	7,830	3,031	10,861
Liguria	3,003	1,565	4,568	3,565	1,635	5,200	3,225	1,636	4,861
Lombardy	6,001	2,168	8,169	8,261	2,377	10,638	7,077	2,727	9,804
Venetia	3,291	1,867	5,158	3,752	1,458	5,210	4,403	2,562	6,965
Emilia	921	250	1,171	1,053	310	1,363	1,246	422	1,668
Tuscany	2,687	559	3,246	1,858	443	2,301	2,511	638	3,149
Marches	1,325	99	1,424	3,159	131	3,290	829	184	1,013
Umbria	20	4	24	19	6	25	15	1	16
Latium	4	7	11	4	6	10	5	9	14
Abruzzi and Molise	4,853	384	5,237	2,028	385	2,413	3,942	903	4,845
Campania	11,523	2,484	14,007	5,078	1,909	6,987	8,319	3,396	11,715
Puglie	374	71	445	229	110	339	532	124	656
Basilicata	4,843	1,346	6,189	3,503	1,454	4,957	7,188	2,808	9,996
Calabria	8,251	1,036	9,287	3,609	841	4,450	7,896	1,920	9,816
Sicily	2,103	767	2,870	1,489	581	2,007	1,138	507	1,645
Sardinia	14	3	17	10	2	12	5	....	5
Total	53,782	14,634	68,416	44,368	13,661	58,049	56,161	20,868	77,029
Temporary emigration:									
Piedmont	19,972	2,854	22,826	17,355	2,794	20,149	14,906	2,938	17,844
Liguria	1,400	250	1,650	906	301	1,207	1,126	284	1,410
Lombardy	13,545	586	14,131	11,816	500	12,316	8,349	491	8,840
Venetia	38,197	2,349	40,546	38,572	2,308	40,880	33,444	2,441	35,885
Emilia	2,811	344	5,155	3,539	278	3,817	3,047	347	3,394
Tuscany	6,815	559	7,374	5,149	628	5,797	7,098	708	7,806
Marches	264	20	284	159	20	179	100	8	108
Umbria	8	3	11	4	2	6	12	3	15
Latium	1	....	1	1	1	2	7	....	7
Abruzzi and Molise	3,638	168	3,806	2,347	215	2,562	1,161	210	1,371
Campania	1,371	525	1,896	651	192	843	1,046	364	1,410
Puglie	437	139	576	273	40	313	199	17	216
Basilicata	684	185	869	105	19	124	12	10	22
Calabria	245	14	259	260	13	273	1,006	86	1,092
Sicily	968	202	1,170	318	95	413	382	159	541
Sardinia	107	24	131	88	19	107	187	16	203
Total	92,463	8,222	100,685	81,543	7,425	88,968	72,082	8,082	80,164
Grand total	146,245	22,856	169,101	125,911	21,106	147,017	128,243	28,950	157,193

*Occupations and professions of emigrants from Italy to foreign countries from 1879 to 1885, and proportion.**

Items.	Permanent emigrants.							Temporary emigrants.						
	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
Husbandmen and shepherds	21, 153	18, 082	19, 375	32, 755	37, 864	29, 309	38, 059	27, 415	30, 332	35, 215	36, 645	40, 449	31, 678	31, 980
Navvies, porters, and other day laborers	3, 216	3, 979	5, 936	8, 441	8, 301	7, 320	7, 932	18, 287	19, 926	23, 515	28, 747	31, 173	28, 175	21, 496
Masons and stone-cutters	1, 283	964	1, 207	2, 784	2, 711	2, 826	3, 505	13, 466	13, 984	18, 212	12, 847	14, 633	14, 505	12, 318
Artisans and operatives	4, 081	4, 141	4, 668	6, 035	6, 099	6, 029	8, 491	7, 963	7, 553	6, 518	5, 931	4, 958	4, 381	4, 015
Business men and manufacturers	879	783	865	1, 300	1, 361	1, 287	1, 517	1, 332	1, 294	1, 332	1, 471	1, 123	1, 156	986
Liberal professions	331	415	254	708	463	401	598	767	495	509	626	499	525	485
Servants	379	388	467	819	646	788	1, 196	913	631	983	989	805	838	870
Itinerant	211	391	211	455	307	192	201	1, 283	1, 131	1, 055	835	701	753	831
Actors	38	76	86	115	80	66	104	169	209	215	320	414	438	466
Vagrants, paupers, and nondescripts	77	5	20	63	9	69	11	209	272	388	400	12	222	193
Miscellaneous trades and professions	916	936	955	1, 550	1, 528	1, 443	1, 749	1, 369	1, 234	1, 263	1, 467	1, 348	1, 203	1, 095
Trades and professions unknown	314	488	268	342	252	309	429	401	203	144	296	266	275	608
Total	32, 928	30, 648	34, 312	55, 367	59, 621	50, 039	63, 822	73, 574	77, 264	89, 344	90, 583	96, 441	84, 149	75, 348

PROPORTION PER 100.

Items.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
Husbandmen and shepherds	64. 24	59. 00	56. 47	59. 16	63. 50	58. 57	59. 63	37. 26	39. 26	39. 41	40. 46	41. 94	37. 65	42. 43
Navvies, porters, and other day laborers	9. 77	12. 98	17. 30	15. 25	13. 92	14. 63	12. 43	24. 86	25. 80	26. 32	31. 74	32. 32	33. 48	28. 53
Masons and stone-cutters	3. 90	3. 14	3. 52	5. 03	4. 55	5. 65	5. 49	18. 30	18. 10	20. 40	14. 18	15. 17	17. 24	16. 34
Artisans and operatives	12. 39	13. 51	13. 60	10. 90	10. 23	12. 05	13. 30	10. 82	9. 78	7. 29	6. 55	5. 14	5. 21	5. 34
Business men and manufacturers	2. 67	2. 56	2. 52	2. 35	2. 28	2. 57	2. 42	1. 81	1. 67	1. 49	1. 62	1. 16	1. 37	1. 32
Liberal professions	1. 01	1. 35	0. 74	1. 28	0. 78	0. 80	0. 94	1. 04	0. 64	0. 57	0. 69	0. 52	0. 62	0. 64
Servants	1. 15	1. 27	1. 36	1. 48	1. 08	1. 58	1. 87	1. 24	0. 82	1. 10	1. 09	0. 90	1. 00	1. 16
Itinerant	0. 64	1. 28	0. 62	0. 82	0. 52	0. 38	0. 32	1. 74	1. 46	1. 18	0. 92	0. 73	0. 89	1. 10
Actors	0. 12	0. 25	0. 25	0. 20	0. 14	0. 13	0. 16	0. 23	0. 27	0. 24	0. 35	0. 43	0. 52	0. 62
Vagrants, paupers, and nondescripts	0. 23	0. 02	0. 06	0. 11	0. 02	0. 14	0. 02	0. 29	0. 35	0. 43	0. 45	0. 01	0. 26	0. 26
Miscellaneous trades and professions	2. 93	3. 05	2. 78	2. 80	2. 56	2. 88	2. 75	1. 86	1. 59	1. 41	1. 62	1. 40	1. 43	1. 45
Trades and professions unknown	0. 95	1. 59	0. 78	0. 62	0. 42	0. 62	0. 67	0. 55	0. 26	0. 16	0. 33	0. 28	0. 33	0. 81

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* Not including children under 14 years of age.

Countries to which emigrants from Italy went from 1876 to 1885, and proportion per country.

Countries.	Number of emigrants.										Proportion per 100.									
	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
EUROPE.																				
Austria	20,534	17,944	18,391	18,617	20,493	20,503	12,101	17,252	22,226	16,962	18.07	18.09	19.10	15.54	17.09	15.09	7.49	10.20	15.12	10.79
Hungary							8,329	9,535	10,470	10,744							5.16	5.64	7.12	6.84
Switzerland	18,655	13,498	10,782	10,401	13,074	10,245	8,476	6,348	5,509	4,583	17.15	13.61	11.20	8.68	10.90	7.54	5.24	3.75	3.75	2.91
France	34,500	33,333	33,552	39,713	43,172	50,735	53,037	46,768	38,523	33,438	31.73	33.60	34.85	33.14	36.00	37.35	32.83	27.66	26.20	21.27
Belgium and Holland	236	184	197	179	208	157	271	543	218	1,386	0.22	0.13	0.20	0.15	0.17	0.12	0.17	0.32	0.15	0.88
Germany	9,623	9,056	6,916	6,700	4,277	5,793	7,662	12,376	4,271	4,532	8.85	9.13	7.18	5.60	3.57	4.27	4.74	7.32	2.91	2.88
Great Britain	257	560	700	626	469	1,094	512	379	336	486	0.24	0.56	0.73	0.51	0.39	0.80	0.32	0.22	0.23	0.31
Sweden, Norway, and Denmark	75	15	7	17	4	39	12	77	29	30	0.07	0.01	0.01	0.01	0.01	0.03	0.01	0.05	0.02	0.02
Russia	566	166	393	264	278	437	218	328	214	255	0.52	0.17	0.39	0.22	0.23	0.32	0.13	0.19	0.15	0.16
Spain and Portugal	886	436	500	587	753	793	1,252	931	580	820	0.81	0.44	0.52	0.49	0.63	0.58	0.77	0.55	0.39	0.53
Servia, Roumania, Greece, and Turkey	1,038	1,371	949	2,156	1,189	1,436	1,512	3,839	4,707	3,877	0.95	1.38	0.99	1.80	0.99	1.06	0.94	2.27	3.20	2.47
Other European countries	......	......	......	744	312	875	348	289	475	1,110	......	......	......	0.62	0.26	0.64	0.34	0.18	0.32	0.71
Total for Europe	86,379	76,515	72,367	80,004	84,224	92,107	93,930	80,986	87,558	78,232	79.41	77.12	75.17	66.76	70.24	67.81	58.14	58.35	59.60	49.77
NORTH AFRICA.																				
Egypt	768	616	620	637	758	837	2,213	1,374	850	1,194	0.71	0.65	0.64	0.53	0.63	0.61	1.37	0.81	0.58	0.76
Tunis	304	282	585	467	260	265	2,235	1,867	637	818	0.27	0.28	0.61	0.39	0.22	0.20	1.38	1.10	0.43	0.52
Algiers	1,472	385	1,493	1,419	1,390	1,552	3,325	2,882	1,636	3,423	1.35	0.39	1.55	1.19	1.16	1.14	2.06	1.71	1.11	2.18
Total for North Africa	2,544	1,313	2,698	2,523	2,408	2,654	7,773	6,123	3,123	5,435	2.33	1.32	2.80	2.11	2.01	1.95	4.81	3.62	2.12	3.46
AMERICA.																				
United States and Canada	1,411	976	1,993	3,208	5,756	11,868	18,669	21,337	10,847	13,096	......	0.98	2.07	2.68	4.80	8.74	11.56	12.62	7.37	8.33
Mexico, Colombia, Venezuela, and Central America		......	1,941	4,990	4,850	1,779	3,741	4,178	1,289	1,583			2.02	4.16	4.05	1.31	2.31	2.47	0.88	1.01
Brazil	14,708	14,238	4,533	7,999	6,080	6,766	9,071	7,590	6,116	12,311	13.52	14.25	4.71	6.67	5.07	4.98	5.62	4.89	4.16	7.83
Chili and Peru		222	440	270	188	285	531	317	350	366		0.23	0.46	0.23	0.16	0.21	0.33	0.19	0.24	0.23
Republics of the Plata	3,461	5,733	8,645	14,166	13,345	16,947	24,526	26,075	34,016	40,054	1.33	5.78	8.98	11.82	11.13	12.48	15.18	15.42	23.14	25.48
Other American countries	......	......	3,191	6,442	2,861	3,226	3,154	3,891	2,849	5,080	......	......	3.31	5.38	2.38	2.37	1.95	2.30	1.94	3.23
Total for America	19,610	21,169	20,743	37,075	33,080	40,871	59,695	63,388	55,467	72,490	18.03	21.34	21.56	30.94	27.59	30.09	36.95	37.49	37.73	46.11
Other countries of Africa, Asia, and Australia	238	216	460	229	189	200	164	925	869	1,036	0.23	0.22	0.48	0.19	0.16	0.15	0.10	0.54	0.59	0.66
Grand total	108,771	99,218	96,268	119,831	119,901	135,832	161,562	169,101	147,017	157,193	100	100	100	100	100	100	100	100	100	100

The greater number of emigrants from this consular district, as well as from other parts of the Kingdom, is drawn from the rural districts—they being farm laborers, shepherds, and peasants. A considerable proportion of the total number of emigrants to the United States leave the country in the hope of finding work on railway constructions and other public works. Emigrants from the highlands are sometimes small peasant proprietors; but from the lowlands they are generally farm laborers. In this district, as well as in other parts of the Kingdom, emigrants for the United States rarely carry more than from $10 to $30 over and above their passage money, and in many instances it has been found that this amount, including passage money, has been raised by loans at the rate of from 50 to 75 per cent. interest; this of course, is all to be paid from the prospective earnings in America.

In 1882 the Government issued a circular inviting the prefects of the Kingdom to furnish accurate information as to the causes of emigration from their respective provinces and its effect on the economical condition of the country.

Categorical answers to the following questions were requested:

(1) Are people driven from the country by destitution alone, or are they influenced by speculators interested in marine transportation, or by the paid agents of foreign Governments or emigration companies?

(2) Is it true that in many instances entire families of small peasant land-owners sell all their possessions to enable them to emigrate?

(3) What positive and practical effect has this emigration produced on wages, on the money value of land, and in general on the agricultural economy of the communes or provinces during the last ten years?

(4) What changes in the direction of emigration have taken place during the decade?

(5) To what classes of society do emigrants from the several districts belong? Are they land-owners, farmers, or laborers who emigrate for want of employment?

The answers of the prefects were nearly unanimous in ascribing emigration to three causes, namely, destitution, lack of work, and a natural desire to improve their condition.

It appeared that during recent years there have been various illicit means used for inducing persons to emigrate, such as flattering advertisements, letters, offers, in the interest of persons or swindling companies, of from $4 to $6 per emigrant to persons who can influence emigration. Changes in the direction of emigration have been slight.

It was found that nearly nine-tenths of emigrants to all countries were drawn from the agricultural classes.

Cases of land-owners who sell their possessions to enable them to emigrate were found to be comparatively rare, and it was found that emigration had not produced any appreciable effect on wages, or on the money value of land, neither on the economy of the country in general.

Compulsory military service, onerous taxation, and strikes have had practically no influence on emigration to the United States.

WAGES AND COST OF LIVING.

As to the wages of agricultural laborers, from whom the chief number of emigrants to the United States from this district and from Italy are drawn, I may say that near Rome and other large towns they receive from 20 to 60 cents per day, not including board and lodging, and in the purely rural districts from 20 to 40 cents. Artisans are paid from 50 cents to $1 per day, and miners from 60 cents to $1.20.

The cost of living is perhaps nowhere so elastic and variable as in Italy. Living may be had from 10 to 60 cents and over per day by persons of the laboring classes.

The lowest cost of living to the laboring classes in the city of Rome and its environs would be as follows:

Breakfast.—A loaf of coarse wheat bread, unsalted, weighing 12 ounces, 2 cents; fruit in summer and cured cheese in winter, 1 cent; total, 3 cents.

Dinner (at noon-day).—One-half loaf of bread as above, 1 cent; a stew made from scraps of tripe, lungs, and the like, or soup prepared with garlics or onions, pork fat, or lard thickened with garlics, olive-oil, or grease, 3 cents; total, 4 cents.

Supper.—Same as breakfast, or varied with salad and bread; total, 3 cents.

Lodging.—Single person, at 60 cents per month; per day, 2 cents.

Grand total of cost of living and lodging per day, 12 cents.

Clothing is a small item of expense, and laborers earning small amounts will always undertake odd jobs to procure extras or an occasional glass of wine.

MORALS.

The civil marriage is the only marriage recognized by Italian law. The Pope alone can dissolve the bonds of matrimony, but rarely exercises this power.

In recent years, on an average, out of the total number of children born in the Kingdom, 92½ per cent. have been legitimate and 7½ per cent. illegitimate.

I am satisfied that there is no emigration to the United States of chronic paupers or insane persons, either from this district or other portions of the Kingdom, and also no assisted emigration.

The Government does nothing to prohibit or restrict emigration. Its attitude is simply that of watchfulness to prevent the swindling or deceiving of ignorant persons.

No special rates of fare are offered by any company or companies in this district. The fare usually paid by third-class passengers from Italian ports to New York is the regular steamer rate of about $30 for each person.

In the case of emigration to the United States, the large number of Italians who have there found what is for them lucrative employment has greatly influenced the current of emigration in that direction during the past few years. The steamers of the Italian General Navigation Company, known as the "Florio-Rubattino" steamers, now plying direct between Italian ports and New York, have also influenced considerably in increasing the number of emigrants, especially from the southern portion of the Kingdom.

A proof of this may be found in the increased number of emigrants to the United States directly following the establishment of this line in 1879.

Emigration to the United States from this consular district is chiefly through the port of Naples; for other portions of the Kingdom it is through the ports of Naples, Palermo, and Genoa. A comparatively small number embark from France at the ports of Marseilles, Bordeaux, and Havre, and a few from the ports of Germany and England.

As to the habits and morals of the emigrants to the United States from the northern and central portions of Italy, both men and women are sober and industrious, and as a rule trustworthy and moral. They are generally strong, powerful workers, and capable of enduring great fatigue. A less favorable view can be taken of the emigrants from the southern districts and Sicily. These are the most illiterate parts of Italy, and in these districts brigandage was for many years extremely prevalent. The men are frequently hot-tempered and quarrels often end in bloodshed. They are, however, seldom addicted to drunkenness, and the women are regarded as chaste. In spite of the prevalent opinion that the Southern Italian laboring classes are lazy, they are, like the rest of the Italians, a hard-working and industrious people, and endure hardship and adversity with great patience.

WILLIAM L. ALDEN,
Consul-General.

UNITED STATES CONSULATE,
Rome, Italy, August 2, 1886.

MILAN.

REPORT OF CONSUL CROUCH.

The following statistics are taken from the reports of the department of agriculture, industry, and commerce, which assumed charge of this branch in 1876. The statistics previous to this time are practically without worth. Even those given below are defective and not entirely reliable, for the sources of error, especially in Northern Italy, are very great, as a brief description of the methods employed will show.

The mayors of the various communes into which the provinces are subdivided, report each year the number of emigrants from their communes, the character, whether the emigration is temporary or permanent, the trade or occupation of the emigrants, and other facts of like nature. For their information they rely mainly upon the register of the passports, with which each emigrant is expected to provide himself before his departure, and this information they supplement by any facts which may come under their personal observation or be reported to them from unofficial sources. Such a system may be sufficiently exact when the emigration is from sea-ports, but in the facility with which the inhabitants of Lombardy, in the search for employment, pass over the borders into Austria, and especially Switzerland, and from there, or through Piedmont, into France, is at once apparently a very fertile source of error. Moreover, emigrants passing into these countries in search of temporary employment are very often induced to emigrate to America. The result of such indirect emigration is seen in the comparison of the statistics of Italy and the United States for the same period:

Total emigration to the United States from Italy.

Source of information.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.
Italian statistics	1,441	976	1,993	3,208	5,756	11,868	18,660	21,337
United States statistics	2,981	3,666	5,392	9,043	12,782	20,107	29,437	30,537

It is evident from this comparison that only the statistics of recent years can be accepted as of any value.

In the statistics for Lombardy previous to the year 1880, emigrants to the United states and the adjoining countries, and to the South American States were all grouped under the heading, "America." The number of emigrants from Lombardy to the United States for those years not being obtainable, I give for sake of completeness the number of emigrants from Lombardy to America as a whole, and then, by way of comparison, the number from the whole of Italy to "America," and to the United States, with the percentage which the number to the United States bears to the whole number. This might afford some information, if the comparison made above did not demonstrate the unreliability of the Italian statistics for those years.

Years.	Lombardy to America.	Italy to America.	Italy to United States.	Per cent. to the United States.
1876	7,391	19,610	1,441	7.4
1877	3,318	21,169	976	4.6
1878	2,746	20,743	1,993	9.6
1879	4,478	37,075	3,208	8.9
1880	3,850	33,080	5,756	17.4

Commencing with 1880 the number of persons leaving Lombardy for the United States, according to Italian statistics, is as follows:

1880	173
1881	536
1882	912
1883	778
1884	*240
1885	355

CLASSES TO WHICH THE EMIGRANTS BELONG.

In general, the largest contingent of emigrants is supplied by the agricultural classes. Among these it is the class of small tenants and the small proprietors, when the products of their bits of land have become absolutely insufficient to support their families, that emigrate to America, more especially, however, to South America. The day-laborer is usually unable to emigrate for lack of means. And, in general, the attachment of these poor people to their homes is so great that they endure the utmost privations rather than leave them, and when persuaded or driven to emigration, it is usually with the intention of returning.

In addition to the agricultural classes which supply the largest number of permanent emigrants, is especially noticeable the class of stone masons. The records of the booking agents in Milan show that the majority of emigrants to the United States so far this year (1886) belong to this latter class. They go to America in the spring months, and being excellent workmen find employment readily at good wages, and are able to return with their earnings, as a majority of them do, and spend the winter comfortably at their homes. The following spring very frequently finds them on their way back to America.

The remainder of the emigrants consist of domestics, waiters, and operatives of the various trades.

CAUSES OF EMIGRATION.

The general causes of emigration are, in a word, overpopulation and high taxes. As to compulsory military service, it is claimed that the desire to avoid it is not a strong factor. It is, however, by no means without effect in this direction, and the desire of the father to see his sons freed from the great sacrifice which military service entails is doubtless often an additional argument in favor of emigration.

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*First six months.

The first impulse to emigration is the discontent among the lower classes with their own condition, which is steadily becoming worse. The cost of living has increased immensely in the last few years, with the great increase in taxes. Rents are higher, while the value of the produce of the land is kept down by foreign competition. The large development of industrial interests in certain portions of Lombardy has not sufficed to remedy these evils, and the final resource is emigration. This takes especially the form of temporary emigration, one or more members of the family passing into the neighboring countries where employment is to be had at better wages. The discontent among these people is further increased by the growing knowledge of the vastly better economic conditions in the countries of the New World, by the example of emigrants returning with comparative wealth, by reports and money sent from friends and relatives who have thus sought and found fortunes, and also by the glowing and exaggerated descriptions of the agents of steamship lines, land companies, and similar interested parties.

The immediate cause is usually the failure, more or less complete, of the crops for the year, and the consequent inability to pay the rent and the heavy taxes. It is noticeable, in this connection, that these people usually emigrate in the autumn months, when the contracts terminate.

Among the operatives the emigration is determined by the want of occupation at home.

In addition to these causes of general application, there are others of a local nature, varying with the different topographical and economical conditions of the different provinces. The northern part of Lombardy is mountainous, sparsely settled, and less fertile. The inhabitants, for the most part, are engaged in agriculture, and belong to the class of small proprietors. Other interests of some importance are quarrying, and, to a small extent, mining. The most important agricultural product is wine. There is a large temporary emigration to France, Switzerland, and other neighboring countries, where the artisans and the surplus of agricultural laborers find employment. The permanent emigration was until 1881 very small, but two or three seasons of inclement weather and the ravages of the peronospora made a perceptible difference. Thus, for instance, from the province of Sondrio, with a population of 120,534, the number of permanent emigrants for the years 1880, 1881, 1882, and 1883 was, respectively, 169, 252, 324, and 810.

The intermediate zone, consisting of hilly country and the land sloping to the lakes, enjoys a favorable climate, is very fertile, producing wine, fruit, and silk cocoons in abundance, and has large industrial interests, especially in the various branches of silk manufacture. Emigration is influenced by the causes which affect the crops, such as the diseases of the vine, which in the past years has done great damage; further by the greater or less demand, and consequently higher or lower prices, for raw silk, the main article of export, and by the greater or less prosperity of the manufacturers.

The southern portion of Lombardy consists of low, level land in the valley of the Po, is of the greatest natural fertility, immensely increased by the perfect system of irrigation in use, and sustaining a population which, for a strictly agricultural district, is probably the most dense in Europe. The crops, a complete failure of which is practically impossible, are of the greatest variety, but consist largely of grain and Indian corn. American competition has caused a decided decrease in the value of these products, and the diminished sustaining power of the land, together with the comparatively large birth-rate, has brought about a decided overpopulation. This condition of affairs is by no means compensated by the growth of other industries, and a continuous and increased emigration may be expected in the future.

SOCIOLOGY.

In Lombardy the most numerous and important class are those engaged in agricultural pursuits. Among these may be distinguished: (1) Land-owners, very largely peasant proprietors; (2) metayers, who hire the land on certain peculiar conditions, paying half the taxes and turning over to the owner half the products; other proportions than the half are also in use; (3) tenants paying a fixed rent, including also a relatively small number enjoying hereditary privileges in this respect on certain estates; (4) the agricultural laborers.

The relative proportion of the first three classes is in the order in which they are named. The fourth class is more numerous than the other three combined. The proprietors, metayers, and tenants all possess a certain capital, however small. The agricultural laborer is entirely dependent on the small wages he receives.

Next in numerical importance are the operatives in the various branches of manufacturing, especially in the silk industries. The silk, cotton, and woolen factories employ largely female labor, the proportion being over four females to one male. The competition of labor in these districts maintains low wages, but on the whole this class is relatively in better condition than the agriculturists.

The food of the working classes consists mainly of *polenta* (boiled Indian meal) and bread of inferior quality, with rice-soup, and among the better classes, macaroni, with greens, cooked with butter, cheese, lard, or milk. Among the poorer agricultural classes, especially in years of bad harvests, the food is almost exclusively polenta, frequently made of diseased and inferior Indian corn. In this connection it is interesting to note that the peculiar disease, pellagra, which is only known to exist in certain portions of Southern Europe, and which the scientists are agreed to consider a chronic poisoning by a substance generated in diseased corn, affects a greater proportion of the population, viz, in 1879, 31.7 per thousand, than in any other section of Italy.

The clothing is made of the inferior grades of mixed cotton and woolen goods, which are to be had very cheap here, and underclothing of cotton.

During the winter, which is more severe in Lombardy and Piedmont than in any other part of Italy, the poorer classes suffer much from exposure. Fuel is very expensive, for wood is scarce, and the coal used, being imported, and subject accordingly to the expense of transportation and customs duties, is also very dear. The poorer classes accordingly go without fires, and it is customary even among classes of a much higher grade socially, either to dispense with fire entirely, or to confine its use to the narrowest possible limit, and to live in imperfectly heated rooms. This is but one example of the economies to which these latter classes—that is to say, the smaller Government officials, the employés in banks, mercantile establishments and similar institutions, in fact, that class who receive a small fixed salary within limits of which they must live—are compelled to resort to keep up appearances.

The dwellings of the poorer classes vary somewhat, in accordance with the particular conditions, but usually these people are crowded together in damp, poorly-ventilated, and generally insalubrious quarters, especially in the larger cities. The standard of cleanliness among these classes, in regard to their dwellings as well as their persons, is decidedly low.

The morals of the peasantry are better than might be expected from their manner of life, and will compare favorably with that of any similar class in Europe. The great majority are married, and the marriages are at a comparatively early age. The number of illegitimate children is not large. As is usually the case, the morality of the rural districts is decidedly superior to that of the cities, the residence of the so-called better classes. Indeed, these latter seem to have a freer and broader conception of the marital relation than prevails in the United States, as divorce statistics would undoubtedly show, if divorce were permitted here by the state and by the church. As it is, only legal separations are allowed. Statistics of Milan show that this was asked for from the courts in 1882, 1883, and 1884, respectively, by 240, 231, and 241 persons. The results in 1884, for instance, were: 22 conciliations, 79 separations by mutual agreement and consent, 98 separations in which the conditions were determined by the court, 27 cases abandoned, and 15 cases still pending at the end of the year.

The number of marriages in the same year, 1884, were 2,774, in a population of 349,597, or 1 to every 122.30 inhabitants. Statistics of births show a total for the year of 11,496, of which 1,200 were illegitimate, or 10.18 per cent., which is about the percentage of the two preceding years. This is a low percentage in comparison with Lyons, Bordeaux, Brussels, Paris, with 24 per cent. to 28 per cent., to say nothing of Munich, Vienna, and St. Petersburg, where nearly 50 per cent. of the births are illegitimate.

EDUCATION.

A large share of the rural population is still in a state of almost absolute ignorance. A belief in witchcraft and the baneful influence of the "evil eye" still lingers, especially in the out-of-the-way districts. In this latter regard, however, the peasant population of Lombardy has made great advances, and in comparison with other portions of Italy is in a state of enlightenment. Education is making rapid strides, and the school system, inefficient and faulty as it is, is gradually making way against the obstacles and opposition it encounters.

The following figures, which I have computed from data furnished by the census of 1881, will give an idea of the condition of education in Lombardy as compared with other sections of Italy. The percentage of the population above the age of ten years unable to read and write was at the time mentioned 36.3 per cent. High as this figure is, Piedmont is the only other division of Italy with an equally low figure. The average per cent. of the population of the whole Kingdom of Italy above the age of ten, unable to read or write, was 61.2 per cent., and in the provinces of the former Kingdom of Naples, which included the greater part of Southern Italy, it was 78.9 per cent. These few figures show that Lombardy is much further advanced than the remainder of the Kingdom, with the single exception of the neighboring province of Piedmont. To show the present condition of education in North and South Italy, and what may be expected from the generation now arriving at manhood, it is interesting to note that the proportion of the part of the population between the ages of ten and twenty years unable to read or write is, in Lombardy, only 21.8 per cent., while in the Neapolitan provinces it is 62.4 per cent.

In general, the inhabitants of Lombardy are an industrious, frugal, and law-abiding people, and, with their neighbors of Piedmont, excel the other Italians in energy and perseverance. Drunkenness is an exceptional occurrence, for the general use of the native wine, which is plentiful and cheap, seems to exclude the desire for distilled liquors. The prudence of the people is also evident, from the fact that, in spite of the exceedingly low reward of labor, they succeed in good years in laying up a little money. Thus the amount of money deposited in the savings-banks exceeds that of almost every other section of Italy. The prevailing religion is that of the Catholic Church.

The Lombards are comparatively free from hereditary disease. The proportion of deaths from consumption is about the same as that of the United States. Syphilitic diseases occur in about the same frequency as in the middle European states, in contrast to Southern Italy, where the proportion is much higher. Of other diseases not hereditary, reference has been made to pellagra, dependent upon an exclusive use of diseased corn. Two other diseases, or rather two manifestations of the same disease, which, like pellagra, occur in greater frequency than in the remainder of Italy, and in a very high proportion as compared with other countries, are struma, or goître, and cretinism, a form of idiocy. Certain districts of the province of Sondrio, in Lombardy, give a proportion probably as high as is found anywhere in the world. It will be remembered that this disease is held to be dependent on the geological formation and the condition of the soil and water, and that the children of emigrants from the affected localities remain free from the disease.

In considering the Lombards as emigrants to the United States, with regard to the question of assimilation, a word as to their race and the climate of their country may not be out of place. It is to be remembered that the inhabitants of Lombardy and Piedmont are a mixed race, of Gallic stock, with an admixture of blood of the Italian tribes, and also a considerable admixture of Germanic blood. These Gallic or Celtic tribes, descending upon Northern Italy about the sixth century B. C., conquered and expelled the original inhabitants, offered a stubborn resistance to the expanding power of Rome, and formed under the emperors the bulwark of the Roman power. At the beginning of the Germanic invasions they were conquered, and their country taken possession of by Longobardians, or Lombards, a German tribe, who mixed with and were gradually absorbed by the superior number of their subject people. The events of the following centuries brought also a certain proportion of Germanic blood. From these facts it is apparent that they stand much nearer to the Americans, a Germanic people with a very considererable admixture of Celtic blood, than the other inhabitants of Southern Europe, and hence are more likely to be assimilated easily and to have no deteriorating influence upon the race.

The climate of Lombardy and Piedmont differs decidedly from that of the remainder of the peninsula. Shut out from the sea and inclosed by the Alps and the Apennines, Northern Italy possesses a so-called continental climate, not unlike that of portions of the United States. The summers are hot and dry, the winters cold. The average temperature in Milan is: Spring, 59.38°; summer 71.42°; autumn, 47.82°; winter, 37°. More attention might be given to the climate to which emigrants are accustomed in directing the stream of immigation. A large number of the immigrants land at Castle Garden with no fixed objective point, but follow the advice they receive from the officials there. Colonists of course will succeed better and also be of greater value to the country where the climate and consequently the products and conditions of life are similar to those of their native land. To send Scandinavians to Dakota is manifestly proper. The same cannot be said of Italians.

DEPORTATION OF [CHRONIC] PAUPERS OR [CHRONIC] INSANE PERSONS—"ASSISTED" EMIGRATION.

I have not been able, even through careful and cautious inquiry, to learn of the deportation of any chronic paupers, or insane persons, or of any "assisted" emigration, except where the assistance has come from relatives already in America. It is common enough for the head of the family to emigrate alone, and, as soon as he has established himself, to have his family follow. Laborers, too poor to emigrate, often receive help from their relatives in America, in which case occupation is frequently provided for them beforehand. These belong for the most part to the class of agricultural laborers, dependent entirely upon their daily wages.

I have called attention above to the unusual prevalence of cretinism in certain sections of Lombardy. In this respect they bear a strong resemblance to certain Swiss cantons, from which the attempted deportation of cretins is notorious. It might be well to bear this fact in mind where emigrants land from this part of Italy.

ATTITUDE OF THE GOVERNMENT.

The attitude of the Government towards emigration is nominally indifferent. Emigrants are expected to provide themselves with passports, which entails a slight expense. Even this is avoided easily by emigrants from Lombardy, who leave by the St. Gothard, passing into Switzerland, and thence to the United States, inasmuch as no passports are required in the former country. On the whole, however, it must be said that emigration is not looked upon with favorable eye by the Government. Nevertheless, in certain districts the overpopulation is so evident, that the desirability of emigration is unwillingly admitted. Where emigration takes place the influence of the Government is used to dissuade the emigrants from going to the United States, and to turn them towards South America. The excuse is that in the United States the Italians disappear in the great mass, and are completely lost to their country, whereas in South America, where they form a considerable part of the population, the national sentiment is preserved, and the commerce with Italy extended.

PRIVILEGES OFFERED BY GOVERNMENTS.

As has been frequently said, the bulk of the emigration is towards the South American states. The inducements and conditions are as follows:

For Brazil: A considerable reduction of fare is offered intending colonists. They are received at Rio Janeiro, and lodged free of expense until their departure for their destination, to which they are conveyed gratis. To each is assigned a lot containing 30 hectares, or 74.13 acres, for which they pay 91 cents to $3.67 per acre. Payment is made either on taking the land or in installments, commencing not later than the commencement of the third year. In the latter case the price is raised 20 per cent. At the end of the fifth year, when all payments have been made, full title to the land is given.

In the Argentine Republic immigrants receive free lodging and board for eight days, which is prolonged in case of illness, and free transportation. Land is sold at the rate of from 59 cents to 78 cents per acre. Payment is to be made in fifths at the end of each year, with complete title at the fifth payment.

In Uruguay and Chili the conditions are substantially the same. Chili offers actual settlers a reduction of fare, and loans them farming utensils and beasts of burden.

Thus the conditions, on the whole, are inferior to those offered by the United States. Inasmuch, however, as agents of steamship companies and of these governments have diffused a knowledge of these conditions, which to the Italian seem very favorable, while the conditions offered by the United States with regard to land have remained unknown, the effect on emigration must have been favorable to the former countries and unfavorable to the latter. In addition, there is the greater affinity of race and language in the former countries, and the certainty of meeting compatriots, and the favorable reports sent home by the latter.

CONCLUSION.

During the years preceding the final liberation of Italy from Austrian dominion a large number of persons were obliged to leave their homes for political reasons. A considerable portion sought refuge in the United States, where many made their permanent homes. These belonged, of course, to the very best classes of the land. At present, however, the emigration is confined almost entirely to the peasantry.

The emigration to the United States has not been large, but in late years it has shown a tendency to increase. The competition between the steamship companies has brought about an increased exertion on the part of the transatlantic companies, especially the lines from Havre and Antwerp, to secure passengers, and they are spreading a knowledge of the conditions offered by the United States with some effect. Free land is a great inducement, and together with the greater accessibility of the United States, and the lower fare, is beginning to turn the emigration more in that direction.

Another reason to expect an increased emigration lies in the fact of overpopulation. This, as I have explained, has led to a large temporary emigration, especially into France. But the competition of these people who work for lower wages has given rise to a feeling of hatred towards them on the part of the French laborer, and to constant conflicts and ill treatment. It is not improbable that sooner or later the French Government will be obliged to protect its laborers against Italian competition. When this occurs, and these people are deprived of the resource of temporary emigration, a large increase in the permanent emigration will be the result, and the United States will undoubtedly share in the increase.

HENRY C. CROUCH,
Consul.

UNITED STATES CONSULATE,
Milan, *October* 4, 1886.

THE NETHERLANDS.

AMSTERDAM.

REPORTS OF CONSUL ECKSTEIN.

I.—EMIGRATION FROM HOLLAND TO THE UNITED STATES.

Prior to the year 1881 there does not appear to have been any control held or record kept from which the number of Netherlanders from this consular district or from this country who have emigrated to the United States could be ascertained and reported.

I am, however, in position to furnish statements showing the number of emigrants of all nationalities who have taken ship in Dutch ports from 1873 to 1885, each year, and their destination, as follows:

Number of emigrants.

Years.	Men.	Women.	Children.	Total.
1873	1,123	818	1,926	3,867
1874	316	226	500	1,042
1875	1,175	556	399	2,130
1876	1,220	693	489	2,402
1877	1,190	696	517	2,403
1878	1,436	779	568	2,783
1879	2,347	1,186	1,131	4,664
1880	5,904	3,166	2,805	11,875
1881	13,805	7,379	7,926	29,110
1882	17,441	8,240	8,640	34,321
1883	10,089	4,380	5,174	19,643
1884*	2,501	1,130	981	4,612
1885*	1,642	645	555	2,842

* The figures covering the years 1884 and 1885 in the above statement represent only the number of emigrants which took ship at Amsterdam during those years.

Destination of emigrants.

Years.	United States.	South America.	Australia.	Africa.	Total inclusive of other countries.
1875	2,091	13	17	9	2,130
1876	2,344	13	21	24	2,402
1877	2,252	31	53	46	2,403
1878	2,671	21	67	24	2,783
1879	4,529	25	83	27	4,664
1880	11,695	34	115	31	11,875
1881	28,782	77	93	158	29,110
1882	34,157	31	74	59	34,321
1883	19,354	81	15	59	19,643

In 1881 a Government board for superintending the passage and carriage of emigrants entered upon its duties at Amsterdam and Rotterdam.

It was in that year that regular direct steam communication was established between Amsterdam and New York.

The objects of creating it were two-fold, firstly, to insure all required and necessary protection to emigrants in general, and, secondly, to invite and encourage foreign emigrants to come to and embark from

Amsterdam and Rotterdam, and thus benefit the local steamship companies and otherwise foster the interests of those places.

The chief officer of the board at Amsterdam, one D. Van Ketwich, is personally well known to me, and known to me as a most efficient and conscientious person.

Since then a very good control has been and is held, and statistics of emigration are kept and constantly improved.

To Mr. Ketwich I am indebted for the information contained in the following statements; the figures in them are extracted from the books in his office.

Tabular statement exhibiting the number of Netherlanders who emigrated from Amsterdam to New York or to the United States during the last five years.

Years.	Men.	Women.	Children, one to ten years.	Infants.	Total.
1881	1,749	1,090	1,089	275	4,203
1882	1,954	1,165	1,264	302	4,685
1883	1,089	735	688	197	1,709
1884	556	353	330	94	1,333
1885	372	215	108	31	786

The number of emigrants as given in the foregoing table were not all from this consular district, but from that of Rotterdam as well, and on the other hand it is most likely that about a similar number belonging and coming from this district depart from Rotterdam for the United States.

The great falling off in the number of emigrants from this country to ours during the last three years forms a noteworthy feature as relating to the matter in hand, and I endeavor to give in this place the best explanation for it that I can.

I feel justified to say, in the first place, that it has not been owing to favorable surroundings or prosperous conditions prevailing in Holland during that period of time, but that, on the contrary, nearly all material interests were, and particularly in 1884 and 1885, in an exceptionally unsatisfactory state in this country.

What, then, caused the decline in emigration?

I answer, that to me it seems to have been caused, in part, because that many parties anxious to come to our shores lacked the required means for accomplishing that object.

The facts that less favorable accounts were received here during those years respecting the general state of material affairs in the United States, and that less substantial assistance reached here from relatives on our side to enable parties to come on, had also much to do with the decline in emigration from this country.

Again, the labor difficulties which induced our Government to adopt certain measures restricting indiscriminate emigration have not only had the effect of keeping really objectionable persons from coming to the United States, as certainly is desirable, but they have also had the effect of preventing quite a number of unobjectionable, perhaps desirable, persons to seek homes amongst us.

I base this statement upon the fact of having been applied to for information a number of times by intending emigrants, against whom there could have existed no objection to be allowed to land, and who had been led to believe that certain obstacles would be placed in their way on arrival at our shores.

This matter may deserve the special attention and consideration of our Government, as what I am saying about it may apply to other countries as well as to Holland.

My attention has also been called to the further fact of the great depreciation in the price of land suitable for farming and dairy purposes during the past few years, which presumably led to purchases in many cases by parties who under ordinary or other circumstances would have emigrated to the United States.

CLASSES WHICH SUPPLY THE GREATEST NUMBER OF EMIGRANTS.

The superintendent of emigration has kept a classified record showing, so far as practicable, the vocation of the emigrants who left this port for the United States in 1884 and 1885.

The record covers emigrants of all nationalities, and a correct copy of it is as follows:

Emigrants who left Amsterdam for the United States.

Vocations.	1884.	1885.
Farmers	313	400
Laborers, country and town	1,506	688
Merchants, clerks, book-keepers, &c	92	100
Artisans amd mechanics	203	336
Men*	313	28
Women*	1,114	565
Children up to ten years of age	735	443
Infants	246	112
Total	4,612	2,842

* The numbers of men and women as put down in the above statement without any trade or occupation are explained to me to have consisted of old men and women in some cases, more generally, however, of boys and young men who had not yet chosen any calling, and as to women they are said to represent housewives who, together with their unmarried daughters, had the care of the families.

I am assured by the superintendent of emigration here, than whom no one has more accurate knowledge on the subject, that the agricultural class furnishes the principal contingent of the emigrants from Holland.

CAUSES OF EMIGRATION.

The Netherlanders are anything but a migratory or roving sort of people. They hold in high honor everything historical and traditional relating to and which sheds any luster or reflects any credit upon the nation, and of which there is a great deal, as is universally acknowledged, and they, furthermore, are most sincerely attached to the existing and principal national institutions.

It can well be imagined that under such circumstances emigration from the country is but rarely undertaken for insufficient or trivial cause or causes, but is more generally only resorted to when fair prospects exist that those about to give up their homes permanently to settle themselves in the United States, or in any other foreign country, will by so doing greatly improve their chances for bettering their condition in life, and the condition of those who go with them, as well as of those who may be dependent upon them and whom they may leave at home.

From my own observation, and authentic information, I am induced to believe and to state that the main cause of emigration from Holland to the United States, what there has been of it and is, consisted and consists hereof: "That under any wise normal conditions prevailing in our country, when commerce and trade, manufacture and agriculture are flourishing, or only fairly prosperous, the chances there for the newcomers, especially if intelligent and industrious, are generally considered to be, and in my opinion really are, far superior to what they are or would be in Holland at any time to earn a competency or accumulate wealth."

Thus it is that emigration is ordinarily more influenced and increases or decreases according as favorable or unfavorable news respecting the economical and social conditions of the United States is received and circulated here, than it is affected by the local or homestate of affairs.

To a certain but only very limited extent other causes underlie the emigration from this country, but it can be said that neither military service, taxation, strikes, or even surplus population bring about much of it.

MILITARY SERVICE.

It would seem to show how little real compulsion there is or can be in compulsory military service in Holland, when, in this place, I give a translated extract from a war department circular, issued in February, 1873, containing certain instructions to the military authorities, which are still in force and carried out, and wherein the minister says as follows:

> With regard to soldiers on furlough who may desire to emigrate with their families to North America, and who, if they were obliged to remain behind, might lose their means of subsistence, it appears to me desirable to deviate from the course hitherto pursued. I am the more induced to do this because, in my opinion, such a measure cannot be deemed to militate against the interests of the service. Besides, experience teaches that those soldiers who find themselves in such a situation generally leave the country without leave. The consideration that they would consequently be regarded as deserters would seldom deter them, as they would go without any intention to return to their fatherland. A great number owing military duty, now marked on the books as deserters, belong to this category.
>
> I have, therefore, resolved for the future not to refuse to soldiers on furlough, who are not called for active service, and may be at any time situated as above stated, the permission to emigrate to North America; with this proviso, however, that use shall be made of such permission, in each case, within one month of the date of its having been granted, after which period it shall be considered as lapsed. Nor shall such soldiers, before their departures, be exempted thereby from any obligations or duties towards the army.

The law of Holland of August 19, 1861, which relates to the organization of the army and regulates the military service is, it seems to me, altogether very liberal. Here follow a few translated extracts from it:

> The strength of the army is not to exceed the number of 55,000 men.
>
> The army is to be organized, so far as possible, through the enlistment of volunteers. In default of sufficient volunteers for the army the same is to be completed by conscription of the inhabitants who have entered upon their twentieth year.
>
> There is to be a yearly levy which is not to exceed the number of 11,000 men.
>
> It is optional with every one either to render service personally or to furnish a substitute.
>
> The term of the service is five years.
>
> Mustered-in men are to be kept under arms for military exercise and duty during the whole of the first year of their term of service, if found necessary.
>
> In ordinary times the army assembles once annually to receive instructions in the manual of arms and to be inspected during a period not to exceed six weeks, unless it be deemed advisable to dispense entirely or partially with such requirement.
>
> Neither conscripts nor volunteers in the army can, without their consent, be sent to the colonies and possessions of the Netherlands in other parts of the world.

There are also exemptions from military service which may be characterized as very liberal, as well as the law and regulations relating to soldiers who wish to contract marriage and who are married, &c.

TAXATION.

Concerning the matter of taxation in Holland I shall also furnish a few figures, leaving the reader to infer from them whether it is or ought to be considered onerous or otherwise as compared with what taxation is in other European countries and in the United States.

According to a statement published last year by the Association for Statistics in the Netherlands, the product of the principal taxes per head of the population was at different periods, from 1850 to 1884, both inclusive, each year as follows, viz:

Year.	Florins per head.	Year.	Florins per head.
1850	18f., 50c.	1870	20f. 32c.
1855	18 72	1875	23 94
1860	18 08	1880	25 29
1865	18 29	1884	24 41

The foregoing statement comprises direct taxes, such as ground tax, personal tax, and licenses, import duties, excise duties on the articles of sugar, wine, spirits, salt, soap, beer, &c., and certain indirect taxes, such as stamps, registration, and succession duties, &c.

In a series of very ably written lengthy articles from the pen of a gentleman at Leyden, said to be an eminent authority, published in the principal paper of this city, and upon the subject of, "What the workman of the Netherlands pays in taxes," a result is arrived at which the author states as follows, viz:

> If we sum up what is said herein and in formerly published articles, then is shown, calculated for Leeuwarden, what proportion of the taxes are borne and paid by workmen.
>
> It must not be overlooked that the computation has been made upon low estimates, and in more than one respect too low, as for instance import duties are taken note of only on the articles of tea and petroleum, whereas other dutiable articles are consumed by the working classes of the population.
>
> Workmen earning from 5 to 7 florins per week pay excise duty, 11.23 florins per annum; import duty, 2.67½ florins per annum, and personal tax, 3.28½ florins; total, 17.19 florins, being 5½ per cent. on their income.
>
> Workmen earning from 8 to 10 florins per week pay excise duty, 11.23 florins per annum; import duty, 2.67½ florins per annum; personal tax, 6.84½ florins, and capitation tax, 5 florins; total, 25.75 florins, being 5½ per cent. on their income.
>
> Workmen earning from 11 to 13 florins per week pay excise duty, 11.23 florins per annum; import duty, 2.67½ florins per annum; personal tax, 14.96 florins, and capitation tax, 8 florins; total, 36.86½ florins, being 6 per cent. on their income.
>
> Such is the result at which we have arrived—5 or 6 per cent. on their income the workingmen pay in taxes.
>
> Few if any words are necessary to disapprove hereof; the figures speak for themselve. We ought to let these dumb and yet eloquent witnesses arouse us to the necessity of removing this burden from the shoulders of the working people.
>
> There are those who are better able to pay than the workingmen in these times.
>
> If we cannot make them richer, let us cease to impoverish them.

STRIKES.

As to the matter of "strikes" in Holland it can be remarked that hitherto, they have been of rare occurrence.

For detailed information on this point I would respectfully refer to what is stated thereon in my report on Labor in Holland, of July 16, 1884.*

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* Printed in Labor Report, II, p. 1288.

The condition of most of the industrial interests of this country during the last two years, 1884 and 1885, has been such as to cause the workmen more generally "to strike for work," as it were, than to strike in order to compel an increase or prevent a reduction of wages, for shorter working hours or for anything else.

The unfavorable and unsatisfactory situation in which the working and laboring classes have been placed, their consequent discontent, and such troubles and slight disturbances as have taken place, have all been caused more particularly on account of "great scantity of work" than by anything else.

I remember no strikes being reported in 1885. During the present year, 1886, I have heard of only two; one at Enschedé and another at Maastricht.

Regarding the former, I quote from a letter to me received on the subject from Messrs. van Heek & Co., mill-owners at Enschedé, who say:

> We beg to say that the only strike that occurred in our town and neighborhood in the textile manufacturing trade, during a great many years, has just taken place in a weaving shed in this town; commencing on the 1st of April and ending, after four weeks' duration, on the 28th of that month.
>
> About 200 of the weavers out of a total of 250 struck for a re-establishment of their former rate of wages, which, in consequence of the indifferent state of the cotton trade, had been reduced by about 10 per cent. in February last.

The men returned to work without accomplishing their object. Those who were identified with being most active in bringing on the strike were not taken back.

Respecting the other strike, which took place in the glass and earthenware works of Tetrus, Regout & Co., at Maastricht, the firm wrote to me as follows:

> The strike was of no importance. Of the number of 2,800 people we employ, only 180 struck during four days, with the result that about 20 went abroad, and when the others came back to work we admitted them, with the exception of about 30 of them, whom we would not have back.

It is not the impression of those here well able to judge that Holland has any considerable surplus population, or is overpopulated.

However, to afford an opportunity to the reader of this report, or to the student of social statistics or political economy, for purposes of comparison with other countries in Europe and the United States, I add hereto several tabular statements showing the area of this country, its population, and the density of the same.

The following statement shows the area of each province and of the whole of the Netherlands, according to the census of 1879, in hectares:

Provinces.	Hectares	Provinces.	Hectares.
North Brabant	512,832	Overyssel	334,515
Gelderland	508,097	Groningen	229,761
South Holland	302,163	Drenthe	266,268
North Holland	276,977	Limburg	220,426
Zeeland	178,506		
Utrecht	138,402	Total area Netherlands	3,299,992
Friesland	332,044		

Statement showing the population of each province and of the Netherlands on the 1st *of January,* 1885, *according to the registers of population.*

Provinces.	Population.	Provinces.	Population.
North Brabant	491,023	Overyssel	285,280
Gelderland	490,905	Groningen	265,687
South Holland	878,894	Drenthe	124,160
North Holland	761,772	Limburg	249,018
Zeeland	193,965		
Utrecht	206,702	Total population Netherlands	4,278,272
Friesland	330,860		

In 1830 the population was	2,613,487
In 1840 the population was	2,860,559
In 1849 the population was	3,056,879
In 1859 the population was	3,309,128
In 1869 the population was	3,579,529
In 1879 the population was	4,012,693

The next tabular statements show the number of inhabitants to each 1,000 hectares and to each square geographic mile, in each province in 1879, and in the Netherlands, each decade from 1829 to 1879:

In the provinces.

Provinces.	Population.	
	To each 1,000 hectares.	To each square geographical mile.
North Brabant	910	5,009
Gelderland	919	5,059
South Holland	2,659	14,643
North Holland	2,456	13,518
Zeeland	1,057	5,819
Utrecht	1,385	7,620
Friesland	993	5,470
Overyssel	817	4,512
Groningen	1,102	6,069
Drenthe	446	2,458
Limburg	1,086	5,982

In the Netherlands.

Periods.	Population to each 1,000 hectares.	Population to each square geographic mile.
December 31, 1879	1,216	6,696
December 1, 1869	1,089	5,905
December 31, 1859	1,008	5,548
November 19, 1849	936	4,165
December 31, 1839	878	4,833
December 31, 1829	802	4,415

SOCIAL CONDITIONS.

A considerable proportion of the emigrants from this country to the United States are farmers, either land owners or tenants, who, I am assured, as a rule, go with more or less means, in many cases sufficient to purchase some land or small farms when they get to our side.

Such of them as have but little or no money, who are poor when they start, are hardly to be considered paupers, as they bring with them strong arms and stout hearts, a firm will to work, and are imbued with a spirit of manhood and independence.

It ought, therefore, not to be apprehended that such emigrants are ever very likely to become a charge on or a burden to any benevolent institutions, or to any city, county, or State government, on arrival at our shores, but, on the contrary, they, it will appear to me, are just the sort of people who make good citizens.

On this branch of the inquiry I am instructed not to confine myself to merely the emigrants, but to extend it and give information as to the general manner of living as regards housing, eating, and clothing, &c., of the whole population of the district.

In answer on this point I would state, in the first place, that the district which mostly contributes to the emigration comprises three provinces, those of Groningen, Friesland, and North Holland.

As to the general manner of living therein, it may be said that there are no very marked distinguishing features on the part of their population as considered to what it is on the part of the inhabitants in all the other provinces.

But if it is expected, as I doubt, that full and comprehensive information be given of the outside and inside of the palaces, residences, and villas of the aristocratic classes, the rich and upper middle classes, as well as of the plainer habitations, humble dwellings, and tenement houses owned or occupied by all the lower classes, including emigrants in the city and country; if it is expected to be fully and accurately described how and what each of these different classes of the population eat and drink, and how they clothe themselves, &c., then, I regret to say, my answer is apt to fall short of being satisfactory, and may disappoint the Department and the readers of this report.

To accomplish such a task in such a way would necessitate a sort of census to be previously taken, as up to this time there exists no published data, material, or statistics from which any such information could be adduced.

I trust, however, it will suffice when I state that the general manner of living, as regards housing, eating, and clothing on the part of the population in the above-named provinces, as well as in all of Holland, presents as great and similar contrasts between the most and least favored classes as it does in most every other country in Europe.

Side by side with ordinary comfort, great simplicity, and deprivation there exists the greatest comfort, elegance, and luxury; whilst many a workingman's family lives at a cost of 500 florins per annum, there are families whose yearly expenditures run up to 30,000 and 40,000 florins.

For further information on this point, and more particularly as to the manner and cost of living of the working classes, &c., I beg again to refer to what is stated thereon in my report of July 16, 1884, published in Consular Reports, Labor in Foreign Countries, vol. 2.

Being in possession of some statistics relating to the number of houses and families in the Netherlands in 1859, 1869, and 1879; the number

of marriages, divorces, children, natural and legitimate, from 1874 to 1884, inclusive, I compile statements from them as follows:

Statement showing the number of houses, &c., and the number of families, &c., in 1859, 1869, *and* 1879 *in Holland.*

Items.	Census of 1859.	Census of 1869.	Census of 1879.
Inhabited houses	542,395	634,595	729,098
Uninhabited houses	14,491	39,266	22,578
Houses in course of erection	....	1,214	2,391
Inhabited ships	6,684	9,076	9,402
Number of families, exclusive of separately living persons	668,911	748,732	818,805

Marriages.

Years.	Average population.	Marriages.	Per one thousand souls.	Years.	Average population.	Marriages.	Per one thousand souls.
1874	3,741,632	31,353	8.4	1880	4,048,801	30,349	7.4
1875	3,788,395	31,553	8.3	1881	4,087,334	29,849	7.3
1876	3,837,491	31,699	8.2	1882	4,143,524	29,571	7.1
1877	3,895,124	31,470	8.1	1883	4,199,018	29,815	7.1
1878	3,953,339	30,711	7.8	1884	4,251,669	30,528	7.2
1879	4,009,448	30,655	7.6				

Divorces.

Years.	Divorces.	Per one thousand marriages.	From bed and board.		Years.	Divorces.	Per one thousand marriages.	From bed and board.	
			Number.	Per one thousand marriages.				Number.	Per one thousand marriages.
1874	154	4.9	29	0.92	1880	151	5.0	75	2.47
1875	151	4.8	35	1.11	1881	187	6.2	94	3.15
1876	153	4.8	25	0.79	1882	168	5.7	84	2.84
1877	155	4.9	51	1.62	1883	189	6.4	82	2.75
1878	163	5.3	71	2.31	1884	196	6.4	95	3.11
1879	155	5.1	59	1.92					

Statement showing legitimate and natural children.

Years.	Legitimate.					Natural.				
	Male.	Per cent.	Female.	Per cent.	Total.	Male.	Per cent.	Female.	Per cent.	Total.
1874	67,417	51.3	64,107	48.7	131,524	2,318	50.9	2,230	49.1	4,548
1875	69,102	51.5	64,961	48.5	134,063	2,227	50.5	2,179	49.5	4,406
1876	70,630	51.3	66,986	48.7	137,610	2,313	50.4	2,281	49.6	4,594
1877	70,807	51.3	67,223	48.7	138,030	2,310	50.3	2,278	49.7	4,588
1878	71,013	51.4	67,037	48.6	138,050	2,444	52.1	2,252	47.9	4,696
1879	73,116	51.3	69,340	48.7	142,456	2,306	50.6	2,252	49.4	4,558
1880	71,599	51.3	68,103	48.7	139,702	2,112	50.9	2,041	49.1	4,153
1881	71,255	51.3	67,699	48.7	138,954	2,009	50.0	2,006	50.0	4,015
1882	72,939	51.3	69,210	48.7	142,149	2,191	50.7	2,114	49.3	4,305
1883	71,827	51.4	67,987	48.6	139,814	2,130	49.7	2,158	50.3	4,288
1884	73,890	51.4	69,859	48.6	143,749	2,426	51.3	2,305	48.7	4,731

DEPORTATION OF CHRONIC PAUPERS OR INSANE PERSONS, ETC.

No case or cases of deportation of chronic or any paupers or of insane persons, with or without Government aid, have been brought to my knowledge or have been intimated to me during several years last past, and it may safely be stated, I think, that no such reprehensible practice is indulged in in these days, either on the part of the Government or public of this country.

Chronic paupers are not often met with in Holland.

Those who are pauperized through laziness, or habitual idling, soon turn either into mendicants or criminals, careers which generally and speedily lead to their becoming inmates of either work-houses and poor-houses, or of jails and other penal establishments.

For the treatment and care of the insane, rich and poor, male and female, most ample provision is made.

The insane asylums in this country and their general management are highly spoken of.

There are in all, as I am informed, eight such institutions in Holland, situated in different provinces, with a capacity varying as to convenient accommodation for from 200 to about 900 patients.

The largest one, located at Bloemendaal, near Haarlem, named "Meerenberg," surrounded by beautifully and usefully laid out grounds, consisting of about 100 acres, belonging to the establishment, contains at this time fully 900 inmates.

An additional building is now in course of erection there, at a cost of near 400,000 florins, which, when completed, in about two years, is intended to hold about 400 patients.

I visited this "asylum" a few days ago and am indebted to the kind-hearted, generous, and obliging director and "*Hinsmeester*" of the same for showing me around in nearly every part of it.

Whilst I cannot pretend to any particular knowledge or experience as to what insane asylums are in other countries, or as to what all they ought to be anywhere, I would not hesitate to state that to me it seems the "asylum" (*Gesticht*) "Meerenberg" deserves to be characterized a "model institution"; as nearly perfect in all of its appointments as, it would appear, such institutions can well be made.

Furthermore, Holland abounds in public and private establishments of every description, intended for the alleviation of afflicted and unfortunate sufferers, be they rich or poor, young or old, male or female.

Assisted emigation exists always to a more or less considerable extent. It may be divided in two categories, namely, such persons as are not only willing but anxious to emigrate, but who, without any fault of their own, require, receive, and accept assistance in order to realize their intention and object; and of such as are indifferent about emigrating or even opposed to it, but who are prevailed upon to go, and who, as it were, "are emigrated" by well-to-do relatives or friends supplying them the means.

The above first-mentioned class of emigrants is quite numerous, and may be said to compare favorably with others who go, and who are able to pay their own way.

The latter-mentioned class consists, usually, of a sort of never-do-good, indolent, or sluggish persons, of whom there are, luckily, but very few, and who can be characterized as "leaving their country for their country's good," but who may, subsequently, be said to come to "ours" to its injury, in some cases at least.

ATTITUDE OF THE GOVERNMENT TOWARDS EMIGRATION.

From all that I have hitherto observed and learned I feel justified in stating that the Government of this country is perfectly passive as to the matter of emigration; it neither encourages nor restrains it. No impediments or obstacles of any kind are thrown in its way, so far as I know.

Several excellent laws, that of November 27, 1865, and of September 30, 1869, as well as two or three royal decrees, provide for and afford every protection to emigrants, particularly to such as are foreigners, and who come from over the borders to take ship in and depart from any port of Holland.

SPECIAL PRIVILEGES OFFERED TO INDUCE EMIGRATION.

From what is above already stated it will be obvious that nothing is done on the part of the Dutch Government to induce the emigration of any of its citizens. Neither are there, at this time, any corporations which are engaged to bring about emigration in any manner, at least none at all so far as I know and can learn.

The former passenger agents of the company whose ships ply between this port and New York made great exertions in that direction, but neither the company nor their present agents here attempt to cause or influence emigration in any way.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, May 31, 1886.

II.—EMIGRATION FROM AMSTERDAM TO THE UNITED STATES IN 1886.

Through the kindness of D. van Ketwich, esq., the superintendent of emigration at this port, who furnished me the required data and statistics I am enabled to prepare this report.

The total number of persons, men, women, and children, who emigrated to the United States via Amsterdam in 1886, was 4,647, as against 2,842 in 1885, being an increase in the emigration which took place in 1886 over that of the previous year, 1885, amounting to 1,805 persons.

They were all carried in the steamers Edam, Schiedam, and Zaandam, of the Netherlands-American Steam Navigation Company, in twenty-two trips, and all landed at New York.

The number of cabin passengers by same steamers and trips was in 1886, 1,040, whereas in 1885 only 243 cabin passengers were carried, which would show that the Amsterdam line is gaining in favor by the traveling public.

The 4,647 emigrants consisted of 2,546 men, 980 women, 906 children from one to ten years of age, and 215 infants.

As to their nationality may serve the following statement, viz:

Nationalities.	Number.	Nationalities.	Number,
Netherlanders	771	Swedes	74
Germans	1,507	French	39
English	771	Norwegians	10
Austrians	410	Syrians	10
Russians	366	Poles	2
Italians	337	Danes	1
Americans	161	Greeks	1
Swiss	119		
Belgians	68	Total	4,647

The number of 161 Americans put down in the foregoing statement should, it would seem to me, be deducted from the total number representing the emigrants, as the fact of their having gone as steerage passengers caused them to be, but erroneously, classed as emigrants.

The number of Netherlanders who came to our shores last year was very near the same as in the year before; there were 771 in 1886 and 786 in 1885.

The following statement shows in what proportion each province contributed to the emigration in 1886:

Provinces.	Men.	Women.	Children (one to ten years).	Infants.	Total.
Groningen	57	36	51	8	152
Friesland	51	22	25	8	106
Drenthe	5	5	6	3	19
Overyssel	17	11	13	4	45
Gelderland	40	24	29	8	101
Utrecht	7	1	3	....	11
North Holland	75	52	58	13	198
South Holland	26	15	16	6	63
Zeeland	17	12	10	2	41
North Brabant	15	9	9	1	34
Limburg	1	....	....	....	1
Total	311	187	220	53	771

Of the 771 emigrants from Holland, 496 are recorded as being without any trade or occupation, namely, 171 women, 223 children, 54 infants, and 48 youths from ten to eighteen years of age.

As to the trades or occupation of the remaining 275 Dutch emigrants, they are thus stated, viz:

Occupations.	Number.	Occupations.	Number.
Farmers	131	Chimney-sweeps	3
Farm and other laborers	87	Butchers	2
Merchants	9	Servants, male	2
Carpenters	9	Millers	2
Bakers	4	Other trades	17
Servants, females	3		
Dyers	3	Total	275
Blacksmiths	3		

The average time in which the trips were made from this port to New York was fourteen and a half days each, and without any serious or noteworthy accidents happening during the year covered by this report.

The price for steerage passage, which, in the spring of the year, was 60 florins, or about $24, was, in consequence of the Antwerp competition, later on reduced to 48 florins, or about $19.20.

It is agreeable to me to be able to report that the laws and regulations touching hygiene and sanitation as to ships and passengers are being closely looked after and strictly carried out in this port.

For illustration I would mention a case which came under my notice in the course of the year. A young woman named Catherine Schaumburg, of Melsungen, by Cassel, Germany, with her infant, six months old, who had engaged and paid her passage money for a steerage passage, was refused to be taken on board the steamer Edam, Captain Taat, because the child was rather badly afflicted with an eruption of the skin. It was feared the child's sickness might be of a contagious character and endanger the health or lives of other passengers. Through the intermediation of the city authorities, the mother and child were placed in a hospital, where they remained until the child was restored to health; and they have since then continued the voyage.

EMIGRATION FROM THE PROVINCE OF FRIESLAND.

Last year, after receiving instructions from the Department of State to report upon the extent and character of the emigration from this consular district to the United States, I applied for statistics and material to different persons and at various places, and amongst them to his excellency Baron van Harinxma Thoe Slooten, royal commissary of the province of Friesland.

At the time I rendered my report upon the subject, May 31, 1886, I had not yet received any answer from him, but about two months afterwards it came.

In it the royal commissary conveyed to me such full and interesting information relating to the extent, character, &c., of the emigration from the province of Friesland that I concluded to translate his communication and append it to this present report and as supplemental to the report above referred to.

In fact ordinary courtesy dictates this course, as to withhold it from the Department would hardly be proper, after an officer of such high rank had the kindness to take the trouble to prepare it, upon my request and in the belief that it was intended for our Government.

It is as follows:

LEEUWARDEN, *July* 29, 1886.

The UNITED STATES CONSUL, *Amsterdam:*

In response to your letter and request of the 24th of May last, I have the honor herewith to hand you a statement of the emigration from the province of Friesland to the United States, from 1876 to 1885, both inclusive, and a brief account of the social condition, &c., of the classes of people in the community which contribute more particularly to the emigration from this section, as well as more generally to the whole population of the province.

Statement showing the emigration from the province of Friesland to the United States, each year, from 1876 *to* 1885, *both inclusive.*

Years.	Communes.	Heads of families and unmarried men.	Circumstances of the emigrants.			Persons who accompanied heads of families and unmarried men.		
			Well to do.	Less well to do.	Needy or poor.	Women.	Children.	Servants.
1876	7	13	3	10	....	4	17	....
1877	10	21	3	12	6	8	24	1
1878	3	4	....	2	2	2	6	....
1879	6	8	....	7	1	6	9	....
1880	18	114	7	73	34	66	224	1
1881	36	560	17	380	103	335	900	13
1882	32	399	14	310	75	189	537	39
1883	29	276	18	194	64	120	339	7
1884	33	197	7	134	56	71	235	3
1885	23	81	13	54	14	33	128	2
From 1876 to 1885	....	1,673	82	1,176	415	834	2,428	66

As you will observe from the foregoing statement the emigration has since 1882 steadily and considerably diminished.

Most of the communes whence, as was also the case many years ago, emigration directed its course to the United States, belong to or are situated on and surrounded by the so-called alluvial or clayey soil; then follow some communes having diluvial or sandy soil. Only one commune occurs whence any emigration has taken place in recent years where the soil consists entirely or partly of peatbog.

MANNERS AND CUSTOMS.

For centuries the Friesians have been praised for their noble pride, firmness, and constancy, as well as for their courage in any contest, and for attachment to their native soil. To these they always joined a strong sense of liberty and independence, and "Free Friesians" was the appellation by which they were known to foreign nations, an appellation by which their posterity are still fond of being distinguished.

Religion has always been in Friesland an object of the highest veneration, as is evidenced by the great number of churches in the province and by the amount of property belonging to them.

Throughout many ages, for more than two thousand years past, the Friesians have been able to maintain their separate existence as a people. This has contributed in a considerable measure to the preservation of their above-mentioned chief characteristics.

While in most towns the Dutch language is spoken with a Friesian accent, the language of the country districts, excepting the commune "het Bildt," and places along the frontier, &c., is the vernacular or "Low Friesian," which originates from the "Old Friesian language," and which on account of its antiquity and its resemblance to the English and other northern languages, as well as on account of its force and sweetness, is held in great esteem by the people.

Great attention has been paid to its cultivation during the last forty to fifty years, and it has been highly progressive.

Industry, frugality, and economy are, in a large measure, amongst the distinguishing traits of the Friesians.

The Friesians do not always appear amicable or friendly, yet they are hospitable, frank, and kind to all who are favorably known to them. They are passionately fond of popular games and entertainments. Horse-races, skating-matches, boat-races, bowling-matches, and other diversions, affording an opportunity for the exercise and exhibition of muscular strength, are particularly popular with them. On such occasions the Friesian lays aside his habitual reserve and enters heartily into the sport, becomes sometimes even boisterous and indulges to excess.

MANNER OF LIVING.

In the years of great prosperity that preceded the late years of depression the way of living, even among the lower classes, was often anything but simple. However, the force of necessity has gradually again worked a change in this respect, and the former simplicity—living within one's income—has been returned to.

DWELLINGS.

In this regard many material improvements have been effected of late years, not only in the towns but also in the country. The dictates and requirements of hygiene in matters of dwellings and lodgings of every description as well as in factories and work places are being better and more attended to than in bygone days, the public authorities being now unfailing in exercising their prerogatives and influence in all proper cases.

SUBSISTENCE.

The chief articles of food of the lower and laboring classes are: Rye bread, potatoes, farinaceous food, beans, peas, cabbage, turnips, and carrots, &c., with a little fat or often only with a little oil. If their means at all allow it their diet also includes such articles as butter and Friesian cheese, fresh milk and buttermilk, besides coffee and tea. Meat of any kind, though of late years somewhat cheaper, enters but seldom into their dietary.

When their earnings permit of it and meat is used by them it consists only of the poorest cuts of beef or pork, at best of a little mutton, and, in the spring of the year, of the veal of calves twenty-four to forty-eight hours old (*nuchter kalfsvleesch*).

In places along the sea-coast and in those parts of the province where fishing is carried on as a business, fish of inferior quality is used more or less abundantly; in other parts dried, smoked, or salted fish is eaten occasionally.

The style of living of the classes of the community in question is marked, to a certain extent, by striking irregularity.

In the summer months, when the earnings are greater, there are often persons and families who indulge liberally; pauperize themselves thereby, and are consequently amongst those who come around early in the winter to ask relief from the commune.

The extremes of excess and want go, to a considerable degree, hand in hand with plenty of earnings and none at all or scarcely any.

The agricultural classes, from which by far the greater number of emigrants are recruited, take, as a rule, four meals a day.

The first, breakfast, very early in the morning, then dinner at 12 o'clock, a light repast with coffee or tea in the afternoon, and finally supper before going to bed.

The articles of food are here, in the main, the same as above mentioned, but they are, of course, generally more carefully prepared, of a better and more nourishing quality, and taken in greater abundance.

In addition to rye or black bread one finds here also wheaten bread and biscuits, while meat is commonly the principal dish at dinner, and for which in winter salted meat or bacon is substituted. For supper the remains of the dinner are often served up.

There is quite a difference in the manner of living and general condition of the farmers and those whom they employ as determined by their being situated or living in a clayey or sandy and fenny district.

It is true that the number and order of the meals are the same, but the quality of the food consumed is usually much inferior in the sandy and fenny districts.

It may be stated that, as a rule, in the clayey districts, where the interests of the inhabitants consist more especially of cattle-breeding and dairy pursuits, and where consequently fewer hands are required to perform the labor, the wages are generally higher, and as result thereof the workmen can afford to live better.

It is self-understood that what is above said relating to the way in which workmen and laborers, &c., are usually living in this province is not regulated exclusively by their wages or earnings, but also in accordance with the number of members in any family and of how many of them are not alone able but, at the same time, willing and ready to work, or in other words, actually industrious.

Much also depends upon the domesticity and thrift of the female head of the family or steadiness of the husband; in short, upon the physical, moral, and intellectual condition of the head of the family and of the several members thereof.

Here, too, then, the diet is determined by more or less changeable, uncertain circumstances, and it is, therefore, on the whole most difficult to fix upon any general standard regarding the matter.

In prosperous times and in well-regulated families, in which the productive members stand anyways in due proportion to the consuming ones, the standard of living will, of course, be higher than in any opposite case or cases.

It may further be remarked that "the actual condition" of most of the agricultural laborers and their families is about "a medium," which lies between the extremes of pinching poverty and deprivation and "comparative prosperity."

In this connection I cannot well omit also to speak of a certain species of drink, which, though it ought and cannot be classified under the head of this chapter, yet holds an important place among the beverages of the people of the Friesland, namely, "spirituous liquors."

In general, however, the "abuse" of spirits is much less amongst the rustics than amongst the inhabitants of the towns.

The consumption of it in the clayey and fenny districts is greater than in the sandy districts.

Ordinarily the peasant will seldom drink spirits at home, but confines his potations to the tavern.

On receiving calls, and on visiting occasions, and when celebrating any domestic or public festivity, the use of spirits is never eschewed, not even by the women, who, when their husbands, sons, &c., drink gin, indulge in brandy and sugar, or liquors of some description.

The habit of using intoxicating drinks prevails much less on the part of agricultural laborers than on the part of the working classes in the towns.

It is only on public and domestic celebrations and on holidays that some belonging to the former class are allured, forget themselves and drink to excess.

From the above, however, no too favorable conclusion must be adduced concerning the consumption of spirits in the country districts of Friesland, as certain parts are even notorious for the large quantities consumed therein.

There are certain classes of the laboring population, especially those who have no fixed domicile, and move from place to place, whose earnings are precarious, and who usually work in the "polders" and fens, so inured to the habit of "strong drink" as to often ruin them, both morally and physically.

Of late years the use of beer of various sorts has become more in vogue as a substitute for stronger beverages, and its consumption is on the increase.

In conclusion of this paragraph I would remark that the rural population of all degrees are very fond of cake and gingerbread, great quantities of which are eaten in all sorts of forms.

CLOTHING.

The clothing at present worn by the different classes of the population differs but very little from such as is in use by the corresponding classes of the inhabitants in the other provinces of Holland, and this is more particularly the case as regards men's ware. In the country regions it is, generally speaking, very simple. Underclothing consists almost exclusively of some woolen material, and this, in the case of the workingmen, during all seasons of the year, as the climate of the country makes this most desirable if not necessary.

The country women still wear the time-honored Friesian head-gear, the so-called "*ooryzer.*"

In the towns the use of this head ornament is vastly giving way to the ordinary and fashionable head dress of the period. When, however, the ladies of the upper classes, and even many of those less favored by fortune, do wear the head-gear in question, it is invariably made out of gold. Others wear the silver article. The price of a heavy "*ooryzer,*" made of gold, costs often from 250 to 300 florins, and as added thereto there are often jeweled bands across the forehead. The whole ornament frequently represents great value.

POPULATION, MARRIAGES, AND DIVORCES.

The number of marriages during the last ten years has not kept equal pace with the increase of the population. That this is not an evidence of increased prosperity needs no further elucidation or comment.

In the years 1882, 1883, and 1884 there was, in the place of the former regular annual augmentation, even a falling off of the population. This did not occur in consequence of an excess of deaths over births, as in this respect Friesland is generally the most progressive province in the Kingdom; nor has it been caused by the "relative" mortality, but has been solely owing to the fact that a larger number of persons left the province than came to settle therein.

It may be assumed that amongst the first mentioned there were many who were induced to emigrate to the United States, or leave for and settle in other parts of the Netherlands, especially the metropolis (Amsterdam), in the hope of bettering their condition.

In spite of the decrease of population in 1883 and 1884, the number of marriages was no fewer than in 1881.

The number of divorces cannot be called large, but separations *a mensa et thoro* occur more frequently.

The figures in the following statement illustrate what is written under the next-above caption, viz:

Years.	Population on January 1.	Marriages.	Divorces.	Years.	Population on January 1.	Marriages.	Divorces.
1876	318,815	2,755	11	1881	331,515	2,341	8
1877	317,405	2,765	10	1882	329,309	2,262	12
1878	320,160	2,724	18	1883	329,287	2,349	17
1879	323,872	2,652	10	1884	329,130	2,341	10
1880	329,877	2,448	9	1885	330,866	2,370	18

I flatter myself that by the foregoing I have satisfied your wish, but should you desire further explanation or information upon one or another point I shall be ready and pleased to furnish it to you.

The royal commissary in the province of Friesland,

VAN HARINXMA THOE SLOOTEN.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
January 10, 1887.

NORWAY.

REPORT OF CONSUL GADE.

As this district, which embraces Southern and Eastern Norway and the best populated parts of the country, has always contributed by far the largest number of emigrants to the United States, I shall not confine my report to the emigration from this port or my consular district alone, but give at once an account of the whole emigration from its first beginning up to the present time.

No other country in proportion to its population has contributed so much to that of the United States as Norway. About sixty years ago, in 1825, a small craft left the port of Stavanger, in Western Norway, with the first emigrants for America. Some of these, belonging to the Society of Friends, had become dissatisfied with the restricted religious liberty in their native land. A portion of these Norwegian pioneers settled near Rochester, in the State of New York, while others made their way down to Texas. Ten years later other small bands of Norwegians settled in Illinois, Wisconsin, and Minnesota. These three States afterwards became, with Iowa, the principal homes of the many thousands of Norwegians who followed them. In 1840 the Norwegians settled in America still numbered only 1,200, but during the next decade the settlers, all of them belonging to the Lutheran faith, received ministers from the mother country and formed into parishes under the Norwegian Lutheran synod, when their number rose to over 12,000. About two-thirds of this number had settled in Wisconsin, where they bought land and prospered in agricultural pursuits. It is computed that in 1860 the Norwegians in American numbered about 60,000; in 1870 about 180,000, 115,000 of whom were born in Norway.

During the following period of five years, 1871 to 1875, the emigration statistics give the following results:

1871	11,606
1872	13,327
1873	10,097
1874	4,357
1875	4,048
Total	43,435

Of these 33,161 persons were from the rural districts in Norway and 10,274 from the towns. The emigration seemed to threaten to deprive Norway of her most useful hands when it reached the alarming number of 18,070 in the year of 1869, but during the following years it fell again to an inconsiderable number. The period of 1876 to 1880 shows nearly the same total figure as the previous five years, viz, 40,244, but it was the last year, 1880, which alone sent the large number of 20,212 persons.

The following table classifies the emigration from 1876 to 1880:

Years.	Men.	Women.	From rural districts.	Towns.	Total.
1876	2,402	1,952	3,823	532	4,355
1877	1,701	1,505	2,798	408	3,206
1878	2,713	2,150	4,305	558	4,863
1879	4,708	2,900	6,191	1,418	7,608
1880	12,260	7,953	14,218	5,994	20,212
Total	23,784	16,460	31,335	8,909	40,244

It will be observed that the proportion between the peasantry and people emigrating from the towns remained about the same during the two last lusters, viz, four to one, though it has varied much in the single years. It may, however, be safely said that the emigration from the towns is increasing more rapidly than from the rural districts and they consist largely of artisans, clerks, and domestic servants. A very large proportion have been young people between nineteen and twenty years old.

We have now come to the period 1881–'85, when Norwegian emigration reached its climax and attracted general attention, not unmixed with apprehension of its possible influence on the population of the country. The official returns for this period give the following figures:

Years.	From rural districts.	From towns.	Males.	Females.	Under 15 years.	Total.
1881	18,272	7,704	14,910	11,066	7,182	25,976
1882	20,599	8,205	16,538	12,266	6,337	28,804
1883	15,983	6,184	12,358	9,809	5,798	22,167
1884	10,363	4,413	8,044	6,732	3,618	14,776
1885	10,079	3,911	7,272	6,707	3,477	13,987
Total	....	....	....	....	....	105,704

In 1882, when 28,804 Norwegians left their country, the whole population was estimated at 1,900,000, which gave about 1.5 per cent. of its inhabitants as emigrants to America. Not only the population received no increase by births during that year, but it really decreased by 4,000 individuals. Since 1814, when the country passed through the ordeals of war and famine, the country has been always regularly increasing. The large emigration in 1880, 1881, and 1882 may be expected to exercise an unfavorable influence on the growth of the Norwegian population for years to come, as the increase by births was very small during those years.

It can already be seen that the emigration in the present year will show a marked increase on that in the two previous years. The cause of it must probably be found in the favorable reports of better times in America, while a great depression in many branches of trade and commerce continues to reign in this country.

In examining which classes supply the largest number of Norwegian emigrants, we find that farm hands and agriculturists occupy the first place. The wages are but small and quite insufficient in the rural districts for a man with a family to support, and the prospects a young man has to become the proprietor of a farm through his own labor are so distant, if not quite unattainable, that he may well give them up altogether to join his numerous friends and relations in America. These friends, who in many cases own farms in their new homes and need more hands on them, write tempting descriptions of their prosperity in America and the ease with which a young man can improve his condition there, inclosing often prepaid tickets for the passage. The annual emigration statistics show that no less than about 50 per cent. of the emigrants are provided with tickets sent them from America. Traveling agents of the different transatlantic steamship lines carrying emigrants encourge the country population to leave their homes, and a fresh impetus has lately been given to emigration by the many Norwegian-Americans, who come to spend the winters with their friends in their native land.

As a necessary result of the continued exodus of young and strong farm hands, there has been a serious lack of laborers in some of the country districts, and wages have risen in proportion. In many places this loss has been partially balanced by the introduction of modern labor-saving machines, but the proprietors, finding so many difficulties to struggle with, often follow the example of their laborers; for the Norwegian soil is not very productive, the summer is short, and the climate severe. Farming has, consequently, never proved a remunerative pursuit in these latitudes, and Norway, with a population of less than 2,000,000, is annually obliged to import cereals for about $9,000,000. The prospects of the farmers are just at present gloomier than usual, on account of the large supply of cheap grain from America and other producing countries and the general depression in the prices of all agricultural products. Land is, therefore, selling at a heavy loss, while its former owners set off for the Far West.

It is but justice to say that America has gained in the Norwegian contingent of its emigrants, as the race is on the whole distinguished for its intelligence, industry, and the frugality of its habits. They are commonly accused of being slow and tenaciously attached to old habits, a natural consequence of their secluded life in solitary valleys of their native land. But from old times, when they first settled in Iceland and established other remote colonies, they have always proved useful and valuable settlers, ready to assimilate with the people in the land of their adoption.

Next to the agriculturists or "*bönder*," as the peasantry are called in this country, we find artisans of all kinds strongly represented among the emigrants. The official statistics for 1882 report that 1,496 artisans left in that year for America, of whom 150 were blacksmiths, 341 joiners, 129 tailors, 230 shoemakers, 159 carpenters, 96 painters, 75 masons, 71 bakers and confectioners, and 52 mechanics. In the same year 876 seafaring men emigrated, 167 fishermen, and 275 persons who had been engaged as tradesmen, clerks, &c. It is not to be wondered at that Norwegian domestic servants go to America in increasing numbers, as their wages at home are very low, varying from $20 to $40 a year for girls in the towns, and in the country they are even lower; 896 servants are thus reported to have left in 1882. Norwegians employed as servants prove generally honest, good-tempered, and trustworthy. They ought consequently to be especially welcomed in American homes. The principal, and I may say almost the sole cause that Norwegians leave their homes, is the desire to improve their material condition. Hardly any other nation in Europe has for the past seventy years enjoyed more peace and continued progress under free and truly democratic institutions than Norway, and no political disturbances or other social causes of dissatisfaction have been determining influences in emigration. The military service exacted from every Norwegian male at the age of twenty-two has never been so onerous as in other countries of Europe, and I believe it has rarely been a motive for emigration. According to law, persons liable to military duty must apply for permission before emigrating, but I have never heard that the Government has in any case refused it. If these emigrants should return to Norway while still within the legal age, they are required to offer themselves at once for service. As to the military qualities of the Norwegian emigrants, they were sufficiently proved during the American civil war, when whole regiments were formed of Scandinavian volunteers, and many Norwegian seamen were found in the Navy.

The tide of emigration, which has for years deprived this thinly populated country of so many able-bodied men, besides women and children, representing a very large capital of money spent on their support and education, has been felt as a serious national loss. But the Government of this democratic land, where all political power has gradually passed into the hands of the people, has never thought of putting any restriction in their way. Nor, on the other hand, have the authorities encouraged emigration from the poorer districts, where the indigent are an excessive burden to the community. The taxes annually assessed for the support of the poor amount to over five millions of kroner, two-thirds of which go to the poor of the rural districts and the remaining third to the towns. Emigration would indeed be a relief in many cases, but there is no reason to suppose that paupers have ever been shipped from this country to the United States, though the poor boards in the rural districts may, in some instances, have aided poorer emigrants who had friends in America with small sums to make up passage-money. Emigrant agents and shippers here are well informed of the American emigrant law, and know that their own interests are best served by paying full regard to it.

No case has come to my knowledge of any released prisoner who has been sent to America from this country, either by the public or any societies for the care of ex-convicts. Undoubtedly many such are to be found there, but there is at least a better hope of their becoming honest, self-supporting citizens under new conditions and away from the scene of their temptation and failure.

GERH. GADE,
Consul.

UNITED STATES CONSULATE,
Christiania, October 19, 1886.

RUSSIA.

ST. PETERSBURG.

REPORT OF CONSUL-GENERAL YOUNG.

There is but little emigration from Russia, more perhaps to the United States than to any other country. The Government of Russia does not encourage emigration, on the contrary it prohibits all Russian subjects from leaving the Empire of Russia, except Poles and Jews. It does not encourage these in any tangible form, but allows them to leave with written permission. The Mennonites have emigrated perhaps more extensively than any other class of Russian subjects. The Mennonites came to Russia from Old Germany, principally from Prussia and Holland, about the beginning of the nineteenth century, and settled in Southern Russia in the districts of Berdiansk, Ekaterinoslav, and Saratov. There are about 50,000 in all. They are all industrious, thrifty, agricultural people, very quiet and peaceably inclined. They enjoyed comparative repose and freedom from interference till 1871, when it was ordered that the Mennonites should serve in the army. This they absolutely refused to do, not by violence or by any revolutionary means, but stoutly declared that they would not and they did not, but the Czar issued a ukase that all Mennonites should leave Russia within ten years and many of them left under this ukase, but since then they have been relieved from serving in the army but prohibited from leaving the Empire, so that at present no Mennonites can leave the Empire. I am led to believe that the Government is well satisfied and even anxious to get rid of its Israelite population, and when they go it is not with a blessing but with a kick and "glad to get rid of you." There is no register kept of persons who emigrate from Russia that I can get to examine. I think that none exists, and no idea can be formed of the number of emigrants for each year. A few Mennonites manage to slip out every year, and they make good citizens and generally leave this country with some means. Much cannot be said of their morality; they marry, it is true, but are exceedingly loose in their habits of life. The Poles are perhaps a shade better in their private relations and are an industrious people. It is my opinion that compulsory military service is the cause of most of the emigration from Russia, and perhaps the objection of many to the form of government, which is rigorous, but generally just in the administration of the laws, rules, and regulations, for really there are more rules than laws. The lowest classes generally form the greater part of the emigration. I might add that the manner of distributing the land is very distasteful to many people, and that is one cause of discontent. The land is let out in communities and owned by the communities, but not by individuals unless they are able to purchase in certain districts when land is for sale. The class that emigrate is very poor generally. Their general manner of living is quite primitive and plain. The majority of the poor people rarely have meat; they live on black bread made of rye, quite sour, and cabbage soup, and in summer other vegetables, principally cucumbers fresh and pickled in brine. In the winter they are clothed in sheep-skins mostly, and in summer cheap stuffs made of flax and cotton goods. I know of no emigration of "chronic paupers or insane persons." As before stated, there is no aid given to any class of emigrants from Russia. The obstacles in the way of emigration from Russia are the strict police regulations and the system of passports; all subjects, male and female, must have passports and renewed every year.

The entire frontier is guarded closely. No special privileges or rates of fare are offered by the Government or any corporation for aiding emigrants, and these circumstances prevent emigration. There is no system of emigration—none encouraged or assisted—but Jews and Poles are allowed to go when they have proper passports.

P. M. B. YOUNG,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
St. Petersburg, August 6, 1886.

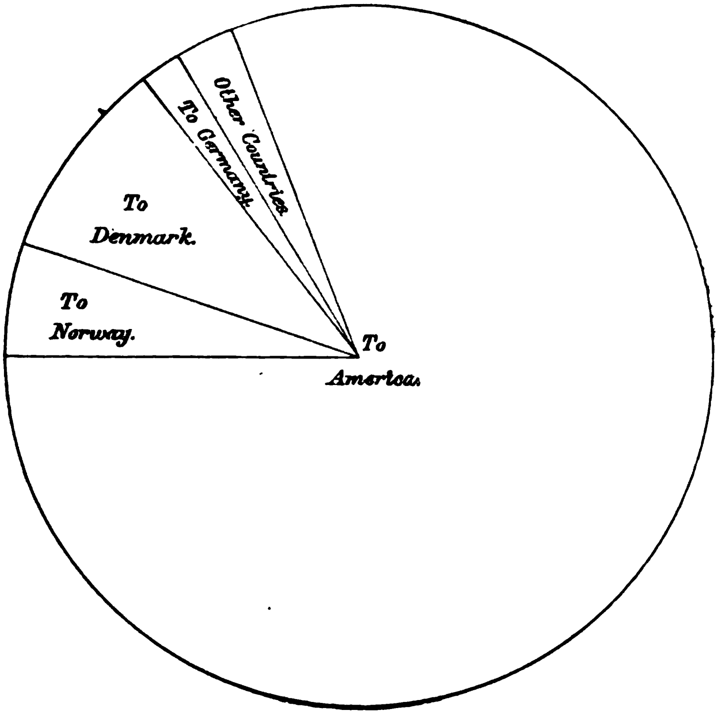
SWEDEN.

REPORT OF CONSUL ELFWING.

The emigrants from Sweden to America during 1851–'60 were 14,868, and during 1861–'65, 9,420.

Year.	Emigrants.	Year.	Emigrants.	Year.	Emigrants.
1866	4,466	1873	9,486	1880	36,263
1867	5,893	1874	3,380	1881	40,642
1868	21,472	1875	3,591	1882	44,859
1869	32,050	1876	3,702	1883	25,675
1870	15,430	1877	2,921	1884	17,664
1871	12,985	1878	4,242		
1872	11,838	1879	12,761		

DISTRIBUTION OF EMIGRATION FROM SWEDEN IN 1884.



During the first six months of 1885 there were 9,403 emigrants. The total number during last year is not yet officially published. The first six months of the present year show a great increase in emigration, or, according to the newspapers, 17,693, but it is not all to the United States, and about 3,000 of these emigrants are foreigners, mostly Finlanders.

Of the classes which supply the greatest number of emigrants the agricultural is probably the largest, if agricultural laborers are herein included. The servants' class, particularly among the women, is also very large. Otherwise every class is represented, and may be thus classified: Servants, laborers, agriculturists, mechanics, engineers and architects, clerks, and merchants.

The cause of emigration is the belief that they can better their condition, and probably also a fondness for an adventurous life. There are no political causes, nor is it onerous taxation, nor a surplus population. Here is, to be sure, compulsory military service, but as it amounts to only thirty days, or fifteen days of service at age of twenty-one years and fifteen days at twenty-two, this cannot be the cause, particularly as every one after twenty-two years of age, since the military service is finished, is free to go wherever he pleases. Next year, however, a law will go in operation by which the time of actual service will be extended to forty-two days for the two years. A main cause of emigration is the fact that so many have emigrated, and these are constantly writing home asking their friends to follow, and also sending them tickets or money to go over with.

The pauperism of this country is not excessively large. The number of paupers was, in the year 1884, in the country, 4.88 per cent. of the population, and in the cities 6.96 per cent., or for the whole country 4.87 per cent. The total population of the country was 4,565,668 in 1880, of which 1,238,126 were land-owners, and the total agricultural population was 2,342,994. The total of the industrial population, or those that belonged to saw-mills, mines, iron works, textile-mills, &c., were 576,366. Those belonging to commerce, navigation, and transportation on land, &c., 222,291, and those to the administration, to the army and navy, clergy, &c., 206,693, &c.

The total number of marriages were, in 1884, 30,200, and those dissolved through divorce in the same year 241. Number of children born in 1884 was 138,754, of which 14,183 were illegitimate. In the city of Stockholm were 29.3 per cent. illegitimate. With Government aid nothing has been done towards deportation of chronic paupers or criminals, but I have heard of a few cases where a community has given money to paupers to go off to America and not be a burden to them. Also philanthropic societies for the relief of liberated criminals have paid the passage to America for such, but I do not think that such practices now take place any longer. Two such societies have even asked me to help them to get the criminal a start in America. The law of reshipping all such cases has undoubtedly put a stop to these practices.

The Swedish Government has done what it could to stop emigration, in that a law, which went in operation last year, decrees that no one can buy a ticket for America or Australia without first producing a certificate to the effect that he does not leave a wife or children unprovided for or unpaid debts, but that does not prevent any one from going to any other foreign place in Europe—to Copenhagen, for instance—and procuring a passage ticket.

I do not think that any special privileges or rates of fare offered by Governments or corporations to induce emigration have much affected there the emigration from Sweden to the United States.

NERE A. ELFWING,
Consul.

UNITED STATES CONSULATE,
Stockholm, August 18, 1886.

SWITZERLAND.

REPORT OF CONSUL-GENERAL WINCHESTER.

Referring to the circular of the Department dated April 27th ultimo, and received on the 15th instant, this consulate general would state that it is impossible to make a very full or satisfactory report on emigration and the various conditions relating to and affecting the same in Switzerland. The machinery of the Swiss Government, national and cantonal, is very simple, limited, and economical. The investigation and statistics of the questions embraced in the circular do not approximate those of the United States in extent, detail, or accuracy.

Emigration from Switzerland was for some time on the decline, but showed a steady and marked increase from 1878 to 1883, inclusive; then a very heavy decline during 1884 and 1885. From 1873 to 1885 the emigration to the United States was as follows:

Year.	Number.	Year.	Number.	Year.	Number.
1873	3,460	1878	1,602	1883	11,619
1874	1,631	1879	2,964	1884	8,539
1875	866	1880	5,792	1885	5,934
1876	1,011	1881	9,996		
1877	1,027	1882	11,069		

The number of emigrants from Switzerland to the United States from 1873 to 1885, both inclusive, was 65,332; emigration to all other countries for the same period, 15,242; total, 80,574—80 per cent. going to the United States.

From July 1, 1876, to June 30, 1884, the various classes were represented as follows:

Occupation.	Number.	Occupation.	Number.
Farmers and laberers	14,410	Printers	71
Millers	234	Bookbinders	72
Bakers	635	Spinners and weavers	292
Butchers	666	Embroiderers	56
Brewers	209	Dyers	75
Gardeners	245	Watchmakers	406
Tailors and tailoresses	1,241	Machine engineers and technologist	251
Shoemakers	667	Mechanics	553
Barbers	77	Smiths	434
Washers and washerwomen	54	Cartwrights	122
Stone-cutters	101	Clerks	2,056
Masons	553	Saloon-keepers	423
Carpenters, joiners, and glasiers	1,585	Teamsters	73
Locksmiths	401	Preachers	55
Painters	288	Teachers	136
Harness-makers	158	Wood-engravers	60
Jewelers	157	Nurses	56
Tinners	100	Servants	1,155
Coopers	149	Students	55

An average year shows the percentage of the trade classes to be: Producers, 50 per cent.; industries, 20 per cent.; commerce, 3.9 per cent.; personal service, 8 per cent.; without specification, 22 per cent.

The causes of emigration from Switzerland to the United States are to be found more in the latter than the former, and are chiefly its cheap and fertile lands, high wages, and the broader field and superior opportunities for obtaining competence and wealth.

The masses of the Swiss, as the result of a very excellent system of compulsory public education, are well informed, observant, and susceptible to the influences indicated.

There are contributory causes in Switzerland not to be overlooked. In physical respects it is not a bountiful motherland. Neither the climate nor the soil is good for agriculture. It is only by persistent, indomitable toil and strict frugality that the peasants can win a scant subsistence. Yet the best is made of it, and it is surprising how much the best can do. Everywhere are seen the proofs of active thought, method, economy, a ready hand, and all the evidence of prosperity in a frugal way.

The area of the country is 41,488 square kilometers, or 15,992 English square miles, giving an average density of population of 177 per English square mile. This density varies from 24 in the Grisons to 932 in the canton of Geneva, per square mile.

Thirty per cent. of the area is occupied by mountains, glaciers, lakes, and rivers. Of the total, only 51 per cent. is under cultivation.

The population dwell mostly in small towns, hamlets, and villages, there being only five towns with more than 25,000 inhabitants. Of the total population by the census of December, 1880, 2,846,102, of whom 1,394,626 were males and 1,451,476 females, there were engaged in agriculture and dairy farming 1,138,678, in manufacturing industry 976,052, in commerce 206,003, in transportation 112,440, in the public service 42,879, living on incomes and pensions 56,055, alimentation 86,837, and 24,926 without a calling, the remainder composed of mining, silk culture, the chase, and the professions.

Some districts are entirely pastoral; not a plow is to be found in them; neither are fruits or vegetables cultivated. Whilst there is perhaps no country more carefully tilled, it has profited but little from modern inventions. The implements of husbandry in general use are of quite a primitive fashion. Labor is cheap, and results are obtained by a patient expenditure of manual toil.

Great attention is paid to forest culture. The rocky mountain side is made to support as many trees as could possibly grow together on the space devoted to them, and each individual tree is carefully looked after and scientifically pruned and trained, so that they shall not interfere with each other, but each has its fair share of space and light. In this work nature aids man's labor and thought by giving to the forests an abundance of moisture, and between the frequent storms and showers abundant floods of sunlight and warmth. It is this that on the mountain sides enables trees to take root and grow to a considerable size on what apparently is little more than a barren rock.*

Emigration is of course stimulated to some extent by the activity and efforts of emigration agencies, of which there are 370 located in Switzerland; the pecuniary assistance doubtless extended in some cases by these agents and the special rates offered by competing steamship lines are additional inducements.

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*A series of reports on Swiss Forestry is printed in Consular Reports No. 74, February, 1887, p. 426.

The federal and cantonal governments do not interfere with emigration either in the way of restriction or encouragement, and have uniformly declined to engage in any colonizing schemes.

Previous to 1881 there was much complaint of objectionable and "assisted" emigration to the United States, but in April, 1881, there went into effect a law, passed by the Swiss Government, forbidding "agents to forward persons to whom the laws of the country to which they emigrate prohibit the entry."

It is gratifying to say that this law appears to be faithfully and energetically inforced by the Swiss officials, and observed by the agents to an extent that promises to remove the evil entirely.

No case of objectionable or "assisted" emigration has come within the knowledge of this consulate-general since July, 1885.

Compulsory military service cannot be said to exercise any material influence on emigration from Switzerland. This service is not distasteful or burdensome, partly from the natural military qualities of the Swiss and partly from the instruction in the elements of drill in the various national and public schools.

Stated as a broad principle, the liability to military service in Switzerland commences at the age of twenty and ceases at the age of forty-four.

The first twelve years are passed in the élite or first line, and the last twelve in the landwehr. Practically, the term of service in the first line has been reduced to eight years, and the men composing it are compelled to attend annually for a few days to undergo inspection and drill. The second line, or landwehr, have no exercises, but merely an annual inspection of arms. Every Swiss who does not perform military service personally is subject to an annual exemption tax. This tax consists of a personal charge of 6 francs, or $1.16, and a supplementary tax in proportion to fortune or income. In no instance, however, is the sum total for which one individual is liable to exceed 3,000 francs, or $579; and no fortune under 1,000 francs, or $193, is liable to the tax; and 600 francs, or $115.80, is to be deducted from the net income of every person who is liable. It is true that since the war against the first Napoleon, when the Confederation furnished a contingent of 15,000 to the allies, Switzerland has not been called on to draw the sword, and there are some who protest against what they term an unnecessary waste of money and time expended on its armed forces; but it is believed that a very large majority of the people are in favor of, and cheerfully comply with, the requirements of the military service, mindful of the warning contained in the reply of the chancellor of the German Empire, who, when asked in 1870 to what extent Swiss neutrality would be respected, said, "To the extent to which you yourselves respect the device of the Scottish order of the Thistle—'*Nemo me impune lacessit.*'"

The subject of military service has been dwelt upon at some length, for, as a rule, it is the most conspicuous cause of emigration generally from Europe to the United States.

Taxation in Switzerland is not onerous. The statistics as to marriage and divorce, children natural and legitimate, present no unusual or striking features. In 1883 the births were 81,974; deaths, 58,633; marriages, 19,695. Of the births 3.7 per cent. were still-born, and the illegitimate an average of 4.5 per cent.

The laws of Switzerland as to marriage, divorce, descent, and distribution of property, and as to all social questions, are substantially of Federal enactment, are liberal, enlightened, and possess no element affecting emigration.

The majority of those engaged in agriculture and dairy farming are comfortably housed, and are able to furnish themselves with suitable clothing and sufficient wholesome diet, pork, fresh and cured, smoked beef, or sometimes called "mummy beef," potatoes, cheese, milk, butter, bread, and a thin wine of his own production, are the principal articles of food.

The poorer classes of people subsist on food of a much inferior quality and limited quantity. Meager cheese, the curd that rises on the heating, after the first curd for the cheese has been removed, black rye bread, potatoes, soup from rice or flour, a very weak dilution of coffee, and potato spirits (a most pernicious distillation), constitute the normal fare of the laboring masses. Fresh meat cannot be reckoned as an article of consumption. It is confined to a very small class; and the numerous large public houses are a great and growing source of revenue to Switzerland.

The laboring man manages his scant and indifferent food to the best advantage, partaking of it frequently. In addition to the usual three regular meals, he has a lunch between breakfast and dinner, and dinner and supper, and then again before retiring to his slumbers.

As to strikes, they have never had any organized existence or influence in Switzerland, therefore could not have entered into the question of emigration.

With a few sporadic, insignificant symptoms, Switzerland has been exempt from the great, widespread labor unrest that has so alarmingly prevailed throughout Europe and the United States.

The subdivision of the soil among a multitude of small proprietors, for the most part energetic, industrious cultivators of their own holdings, largely contributes to render the Swiss people a happy and contented people. The soil of the country is so extensively divided among the population that it is estimated there are nearly 300,000 peasant proprietors, representing a population of about 2,000,000.

There is no country whose laws afford greater facilities for the acquisition and transfer of land. The general tendency is to discourage the centralization or accumulation of landed property in a few hands and to promote small farming as the best parent of general public contentment, happiness, and thrift.

This diffusion of landed property in Switzerland tends to give a great perfection to many social arrangements.

In the most insignificant hamlets and villages there will usually be found a post-office, a regularly-appointed watchman by night, public fountains, a market place, and a fire engine, in the use of which the people are exercised.

There are in Switzerland no instances of great wealth, no appearance of great ease and luxury, no rich and splendid aristocracy, but almost every head of a family, however humble his circumstances, possesses a home belonging to him in fee, with all of its civilizing influences. Pauperism as an institution is scarcely known.

There is pinching, but little actual distress among the industrious poor. As to those whose trade is poverty they are about the same everywhere, neither worse off or better off in any country.

The absence of any grinding poverty is no doubt partly owing to the natural independence of the people as well as to their industrious habits, simple methods of living, and shrewdness in business. Then, their climate is one that tends to brace and nerve to exertion, while the long struggle which they have been forced to keep up in order to hold their own for centuries past has given the people a spirit of self-reliance which largely saves them at least from pauperism. If they were as wasteful, careless, and improvident as our wages supported class the ibex and chamois might soon return to the valley.

The Swiss are known to be ingenious in many kinds of workmanship, specially in wood-carving clock-making, and embroidery. They are keen not only in getting, but in keeping their money. An old proverb says, "It requires ten Jews to cheat a Swiss, and ten Swiss to cheat a Genoese." They present a remarkable and undisturbed type of old provincial life, with many curious survivals of customs and traditions, a deep distrust of innovation and what is new, adhering to a primitive way of doing the simplest things.

Industry, forethought, self-supporting energy, and reciprocal dispositions to neighborly help pervade the population. Brave, enduring, patient, law-abiding, kindly contented in the practice of their simple forms of life and faith, it may be truly said:

> Yet still e'en here content can spread a charm,
> Redress the clime, and all its rage disarm;
> Though poor the peasant's hut, his feast though small,
> He sees his little lot the lot of all.

All the statistics in this report cover the whole of Switzerland.

BOYD WINCHESTER.

UNITED STATES CONSULATE-GENERAL,
Berne, May 22, 1886.

ZURICH.

REPORT OF CONSUL CATLIN.

During the past forty years Switzerland has sent more emigrants to the United States than has France with thirteen times her population. On the other hand, Germany with sixteen times and Ireland with scarcely twice as many inhabitants as Switzerland, have during the same periods sent us respectively twenty-one and sixteen times as many emigrants as she. The following table shows at a glance the relative rate of emigration from Switzerland, as compared with the three other countries mentioned, viz:

Country.	Population.	Emigration* May 5, 1847 to January 1, 1886.	Rate per 1,000 inhabitants.
France	37,405,793	138,959	3.7
Germany	45,238,829	3,113,787	68.8
Ireland	5,159,839	2,355,497	456.4
Switzerland	2,846,102	145,936	51.2

* This embraces the emigration to New York alone, but the additional emigration to the other American sea-ports would not materially alter the ratio.

Swiss transmarine emigration attained in 1883 its greatest proportion, or a total of 13,502, of whom 11,619, or 86 per cent., went to the United States, and of these 10,326 landed at the port of New York. But in the following, 1884, it had suddenly fell off about 25 per cent., and in 1885 still 9 per cent. more. These fluctuations, however, are not uncommon. In 1874, there was a sudden falling off of about 50 per cent. from the previous year, and the depression continued up to 1877, during which year the emigration was only one-third of what it had been in 1873. Then the tide steadily rose again until it reached its highest point in 1883, when it again began to ebb.

These fluctuations are unquestionably ascribable to the variable conditions, whether agricultural or industrial, existing from time to time in either or both of the two countries. In Germany a good year in crops or vintage invariably means a larger emigration to America, as it affords increased funds for the purchase of tickets and the other outlays incident to a change of home. The patriotic Switzer, on the other hand, values a good year as the means of enabling him to avoid emigrating and to remain all the longer among the mountains and valleys of his loved fatherland. The German, in other words, emigrates when he can; the Switzer only when he must.

One principal cause operating to swell the tide of German emigration is lacking in Switzerland, viz, the pressure of compulsory military service. However persistently the right of expatriation may be denied to the young Swiss who goes away to the United States, he is at all events not branded "deserter," as is his fellow-emigrant from over the border. Swiss military requirements are light, and their burden is easy to be borne; so easy, in fact, that to escape them is no inducement whatever to emigrate. We must look, then, for some other ground on which to base the comparatively high percentage of emigration from Switzerland, and it is to be found in the lack of employment resulting from industrial depression, in the difficulties of earning a subsistence, and in the inherent general desire on the part of every man to better his condition in life.

And first in regard to lack of employment. To a considerable extent the substitution of machine for hand labor has, by reducing the demand for the latter, been for years past steadily augmenting the ranks of the unemployed. But, and especially at the present time, the industrial depression in silk and cotton manufacturing centers has a still greater influence in the same directions. Take, for instance, the present condition of the silk industry of the canton of Zurich. During the last two years the number of firms engaged in manufacturing silk has fallen from 136 to 119, the number of employed from 50,396 to 39,084, and the amount of wages annually paid from 21,718,624 francs to 18,230,877 francs. In 1881 there were 19,168, in 1883 17,925, and in 1885 11,959 silk hand weavers employed in the canton. In other words, there were 7,209 fewer silk weavers employed in 1885 than in 1881, and the question naturally arises to what other means of livelihood these 7,209 have turned for subsistence. In a community where all the trades and occupations are overcrowded, where the supply of labor invariably exceeds the demand and where new enterprises or undertakings, such as the building of railroads, canals, or other great public works are lacking, the finding of new employment all at once for 7,000 persons in a single canton is practically an impossibility. Emigration, either to other cantons or to other lands, follows as a matter of necessity.

The difficulties and hardships which the lower and many of the rural classes in Switzerland encounter in the struggle for existence also contribute largely to swell the current of emigration to foreign lands. Switzerland can in no sense of the word be called an agricultural land. She does not produce in one year enough grain to supply her population for one-sixth of the period. Her annual deficit amounts to 6,154,256 metric centners, equivalent in value to $30,000,000, and most of which has to be imported from the Black Sea and lower Danube regions. It is true that the facilities for the delivery of this grain in Switzerland have been of late greatly enhanced by the opening of the Arlberg railway route, yet the deficit exists nevertheless, and always will, no doubt, unless some means can be found, which is not probable, of increasing the cultivable area of Switzerland. Now, with $30,000,000 to be sent away into other countries for bread, it follows there must exist great industrial prosperity to balance the account and pay the bill. But where, as in the present instance, industries are depressed, payment comes hard, and bread becomes correspondingly scarce. Here is another great stimulant to emigration.

There is still another point from which this question may be viewed, viz, from that of the desire inherent in every man's nature to better his position where he can. To "better his position" consists, in the case of a young single man, in acquiring the means to marry and found a home and family. In the case of the man already possessing a wife and family, it consists in making some better provision for their joint welfare and maintenance. This leads us to a consideration of the prevalence of marriage in Switzerland. The annual percentage of marriages to every thousand inhabitants is somewhat lower than it was fifteen years ago. In 1871 it was 7.3, while from 1880 to 1884 it was annually 6.8, the rate in Germany being 7.8, in England 7.7, and in France 7.6. Marriage is, consequently, less prevalent in Switzerland than in either of the three other countries named; the ratio of marriageable women to marriageable men is that of 5 to 4. Of the men who marry 60 per cent. are between the ages of twenty and thirty, and 76 per cent. between the ages of twenty and thirty-five. This tends to show that as a rule young men in Switzerland do not defer marriage, awaiting a competency, as is the case in some other lands. It is also a noticeable feature of Swiss marriage that over 80 per cent. of the men who marry are drawn from the producing and industrial classes.

A study of these facts and figures inclines me to the opinion that the emigration of young men from Switzerland is no more influenced by the existence of hindrances to marriage than it is by a desire to escape military service. Industrial depression and consequent lack of employment are the causes principally operating to send yearly so many thousands of Switzers to our shores. The series of tables, I to IX, accompanying this report, will be found to illustrate more fully, and by cantons, the various figures which have been adduced. Should the present unfortunate condition of Swiss industries continue, and there is no present prospect of any great improvement, and in case no restrictions are in the near future placed upon emigration by our own Government, it is probable that during the next ten years we shall receive largely increased accessions of these hardy, thrifty, and industrious people, whose predecessors have already done so much to develop our resources and populate our great West.

In a recent report on the subject of Mormonism in Switzerland, I adverted at some length to the efforts now being made by missionaries from Utah to secure proselytes to their faith. There is reason to believe that within the last two months a considerable number of converts have left this country for Salt Lake, going by way of Berne (where they have their headquarters), and Basle. But their departure has been so surreptitiously conducted, even to the sending away of their baggage secretly, that it is said to have been practically impossible for even the local authorities to find a pretext for detaining them. In such cases preventive measures would seem to prove more effective if applied at the port of landing in the United States. I can see no means of preventing their departure hence so long as they have committed no offense against the law and go of their own free will.

Cases of what was known as "assisted" emigration were formerly frequent, but now, thanks to the energetic action of the emigration authorities at New York, seem to have ceased altogether. During my service at this post only one case sufficient to arouse suspicion has come within my knowledge, yet even then a rigid investigation disclosed no grounds upon which to base a complaint or a demand that the parties be refused permission to land.

Switzerland, moreover, sends us few if any of the Anarchists and Socialists who of late years have thought to find in our Republic the soil favorable to the propagation of their pestilential doctrines. Her sons, reared to liberty, are slow to abuse it, whether in their own land or in that of their adoption. It has been stated that the man who threw the dynamite bomb in the Chicago riots came from the city of Zurich. I have no means at hand for either substantiating or disproving this statement, but if such be the case, it is quite possible that the person referred to is one of those hundreds of political refugees from Germany, or elsewhere, who, like the convicted Anarchist leader, John Most, have found it convenient to make a short stay here in Zurich, or some other Swiss city, before embarking for the United States. The exclusion of such persons were an easy matter could each emigrant be required, before landing, to produce documentary proof of identity, place of origin, previous occupation, &c., such as under the title of *Legitimations-Papier*, is exacted by the police authorities here or elsewhere throughout the greater part of Europe, as a condition of residence. It is the absence of some such requirement as this that has enabled thousands of irresponsible agitators and refugees to land unchallenged in the United States, and there with impunity, and without even the pretense of an acquired citizenship, to at once set about their work of subverting the priceless heritage of a Washington and a Jefferson. Happily, I say, for Switzerland, she sends us few or none of these firebrands. Her people are not in sympathy with the doctrines of anarchy, and should a general social revolution ever occur it would find no support from a population who like the Swiss have always upheld the principles of free government, and never tolerated the yoke of political bondage.

GEORGE L. CATLIN,
Consul.

UNITED STATES CONSULATE,
ZURICH, *June* 5, 1886.

Statement of transmarine emigration from Switzerland, by cantons, 1871–1884.

Cantons.	1871.	1872.	1873.	1874.	1875.	1876.	1877.
Zurich	277	293	482	144	95	124	134
Berne	855	967	795	457	256	458	380
Lucerne	35	28	43	23	3	32	17
Uri	......	......	......	......	......	......	......
Schwyz	102	106	44	67	28	23	18
Unterwalden, Upper	36	69	60	31	8	12	9
Unterwalden, Lower	2	3	2	4	......	......	......
Glarus	215	259	314	144	43	51	50
Zug	9	5	5	11	4	3	3
Freiburg	19	......	......	......	......	......	......
Solothurn	......	......	......	......	......	......	......
Basel-Stadt	96	100	60	40	60	25	39
Basel-Land	97	47	83	47	37	27	40
Schaffhausen	167	239	267	92	56	18	51
Appenzell, Outer Rhodes	30	35	30	40	9	28	38

Statement of transmarine emigration from Switzerland, &c.—Continued.

Cantons.	1871.	1872.	1873.	1874.	1875.	1876.	1877.
Appenzell, Inner Rhodes	....	....	....	....	....	....	....
St. Galle	310	353	301	206	57	102	90
Graubünden	211	369	304	72	43	40	35
Aargau	420	425	484	142	88	81	123
Thurgau	97	70	80	56	47	37	26
Tessin	644	889	1,195	602	472	393	550
Waadt	....	....	....	....	....	....	....
Wallis	126	552	393	447	435	237	38
Neufchatel	104	90	65	47	28	51	55
Geneva	....	....	....	....	....	....	....
Total	3,852	4,899	4,957	2,672	1,772	1,741	1,691

Cantons.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	
							Number.	Per 1,000.
Zurich	200	248	540	1,329	1,440	1,570	1,206	3.7
Berne	474	941	1,636	3,079	3,560	4,667	2,995	5.5
Lucerne	70	77	141	225	225	190	191	1.4
Uri	....	31	20	88	90	135	94	4.
Schwyz	20	87	299	304	171	186	137	2.6
Unterwalden, Upper	22	32	46	225	112	108	161	10.3
Unterwalden, Lower	3	3	17	23	11	21	28	2.3
Glarus	105	191	412	468	376	311	146	4.2
Zug	3	....	41	50	55	89	202	8.5
Freiburg	41	51	46	49	131	126	163	1.4
Solothurn	94	221	380	359	392	349	230	2.8
Basel-Stadt	53	246	126	253	731	467	404	5.7
Basel-Land	62	231	226	311	331	316	261	4.3
Schaffhausen	61	104	375	369	335	381	266	6.9
Appenzell, Outer Rhodes	26	31	76	148	168	123	91	1.7
Appenzell, Inner Rhodes	....	1	8	15	16	10	5	0.4
St. Galle	193	204	602	1,061	884	520	477	2.2
Graubünden	31	31	68	191	429	467	423	4.4
Aargau	214	359	795	1,010	933	1,271	641	3.2
Thurgau	54	78	131	271	250	172	85	0.8
Tessin	507	667	628	589	455	531	667	5.
Waadt	83	115	82	112	118	308	181	0.8
Wallis	26	84	165	146	390	795	206	2.
Neufchatel	186	206	239	159	258	263	240	2.3
Geneva	130	49	156	101	106	125	108	1.
Total	2,608	4,288	7,255	10,935	11,962	13,502	9,608	3.3

Destination of emigrants from Switzerland, 1871–1884.

Whither.	1871.	1872.	1873.	1874.	1875.	1876.	1877.
North America	2,729	3,288	3,462	1,631	866	1,011	1,027
Central America	146	158	183	82	76	70	91
South America	731	1,150	997	796	642	393	244
Africa	92	177	139	58	77	72	167
Australia	109	60	121	49	74	146	117
Asia	16	14	6	7	9	13	11
Unknown	29	52	49	49	28	36	34
Total	3,852	4,899	4,957	2,672	1,772	1,741	1,691

Whither.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	Total.
North America	1,602	2,964	5,792	9,996	11,069	11,619	8,359	65,415
Central America	38	143	153	134	96	8	5	1,383
South America	570	811	952	624	778	1,852	1,198	11,738
Africa	183	157	192	100	4	2	1	1,421
Australia	144	75	53	28	14	20	50	1,060
Asia	24	27	19	8	....	1	....	155
Unknown	47	111	94	45	1	....	....	575
Total	2,608	4,288	7,255	10,935	11,962	13,502	9,608	81,742

Classification of Swiss emigration of 1883 *and* 1884, *according to previous occupation or pursuit.*

Occupation or pursuit.	1884.								
	Adults.			Children.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Agricultural, &c	2,487	808	3,295	635	492	1,127	3,122	1,300	4,442
Industrial	1,411	534	1,945	268	198	461	1,674	732	2,406
Commercial, &c	384	80	463	26	17	43	409	97	506
Official, professional, and artistic	63	47	110	7	8	15	70	55	125
Servants	6	364	370	4	10	14	10	374	384
Without occupation	453	676	1,129	336	300	636	789	976	1,765
Total	4,803	2,509	7,312	1,271	1,025	2,296	6,074	3,534	9,608
	1883.								
Agricultural, &c	3,800	1,101	4,901	990	863	1,853	4,790	1,964	6,754
Industrial	1,702	479	2,181	352	317	669	2,054	796	2,850
Commercial, &c	285	41	326	25	21	46	310	62	372
Official, professional, and artistic	79	41	120	12	23	35	91	64	155
Servants	75	300	375	15	18	33	90	318	408
Without occupation	484	1,298	1,782	579	602	1,181	1,063	1,900	2,963
Total	6,425	3,260	9,685	1,973	1,844	3,817	8,398	5,104	13,502

Marriages, births, deaths, and increase of population in Switzerland, by cantons, during the year 1884.

Canton.	Population.	Marriages.	Births.	Still-births.	Deaths.						Excess of births over deaths.
					Under 1 year.	1 to 5 years.	5 to 15 years.	15 to 60 years.	Over 60 years.	Total.	
Zurich	329,326	2,657	8,778	433	1,395	443	254	2,138	1,991	6,221	2,557
Berne	542,652	3,690	16,845	758	2,391	934	595	3,525	3,337	10,782	6,063
Lucerne	135,690	786	3,899	121	425	165	121	805	1,156	2,672	627
Uri	23,671	86	564	12	89	30	26	88	98	331	233
Schwyz	52,680	336	1,398	42	255	48	48	352	368	1,071	327
Unterwalden, Upper	15,693	71	326	7	29	36	26	56	124	271	55
Unterwalden, Lower	12,096	75	350	16	40	13	21	96	112	181	68
Glarus	34,213	267	754	51	115	37	20	228	180	580	174
Zug	23,711	140	616	20	97	33	22	180	142	474	142
Freiburg	117,037	745	3,607	123	658	140	87	709	822	2,416	1,191
Solothurn	82,470	551	2,534	72	410	85	77	518	511	1,601	933
Basel-Stadt	71,314	564	2,055	75	337	131	54	446	287	1,255	800
Basel-Land	61,115	436	1,902	77	366	105	40	347	335	1,193	709
Schaffhausen	38,578	202	1,013	45	195	90	44	199	262	790	223
Appenzell, Outer Rhodes	53,116	471	1,704	84	351	94	33	332	368	1,178	526
Appenzell, Inner Rhodes	13,175	87	428	11	99	21	5	109	98	332	96
St. Galle	217,471	1,666	6,457	231	1,246	344	181	1,478	437	4,686	1,771
Graubünden	96,141	523	2,342	64	311	116	96	647	823	1,993	349
Aargau	198,564	1,136	4,977	192	748	253	141	1,152	1,516	3,810	1,167
Thurgau	101,793	738	2,753	106	422	153	103	532	746	1,856	797
Tessin	132,962	760	3,646	96	678	296	186	821	946	2,927	719
Waadt	241,249	1,633	6,656	280	1,042	383	220	1,562	1,664	4,871	1,785
Wallis	101,409	598	2,945	57	391	165	108	539	647	1,850	1,095
Neufchatel	106,042	870	3,420	144	698	210	102	771	544	2,265	1,155
Geneva	104,590	810	2,202	106	389	169	93	1,082	761	2,494	292
Total	2,906,752	19,898	81,571	3,223	13,117	4,494	2,703	18,712	19,275	58,301	23,270

Statement showing the excess of births over deaths in Switzerland, by cantons, to every 1,000 inhabitants.

Cantons.	1871-'75.	1876-'80.	1881.	1882.	1883.	1884.
Zurich	4.9	7.5	7.5	5.6	7.4	7.8
Berne	10.0	11.0	10.9	9.5	11.3	11.2
Lucerne	5.6	5.4	1.7	2.8	4.1	4.6
Uri	8.4	5.9	4.6	6.3	9.8	9.8
Schwyz	8.8	8.3	6.9	6.4	7.5	6.2
Unterwalden, Upper	7.7	11.1	5.6	4.8	5.8	2.5
Unterwalden, Lower	7.9	7.0	5.8	5.5	6.0	5.6
Glarus	7.1	6.8	1.9	5.5	4.3	5.1
Zug	5.2	6.3	4.6	8.7	7.7	6.0
Freiburg	5.1	8.2	9.1	7.8	9.6	10.2
Solothurn	8.6	9.9	8.4	8.1	9.6	11.3
Basel-Stadt	9.9	10.9	7.3	10.7	9.9	11.2
Basel-Land	9.4	12 0	9.7	10.0	11.4	11.6
Schaffhausen	8.3	11.8	7.8	10.2	11.8	5.8
Appenzell, Outer Rhodes	5.2	8.8	9.4	7.4	10.9	9.9
Appenzell, Inner Rhodes	7.6	7.9	2.3	3.4	3.8	7.3
St. Galle	5.2	7.3	7.2	6.5	7.9	8.1
Graubünden	4.7	4.5	5.4	3.3	5.1	3.6
Aargau	5.8	7.3	5.5	6.2	6.2	5.9
Thurgau	5.3	8.1	7.1	5.7	6.9	7.8
Tessin	4.3	6.9	4.5	5.0	6.3	5.4
Waadt	3.7	6.8	7.4	6.6	6.3	7.4
Wallis	8.0	9.7	10.1	8.4	9.7	10.8
Neufchatel	7.7	9.8	8.1	10.8	11.1	10.9
Geneva	1.0	2.4	2.9	0.8	0.7	2.8
Total	6.4	8.2	7.4	6.9	8.0	8.0

Excess of births over deaths per thousand inhabitants in Switzerland, as compared with other lands.

Land.	1871-'75.	1876-'80.	1881.	1882.	1883.
Switzerland	6.4	8.2	7.4	6.9	8.0
Prussia	11.1	13.9	12.0	12.1	11.3
Bavaria	8.3	10.8	9.8	9.2	7.8
Saxony	12.7	14.8	13.8	13.3	12.2
Wurtemberg	12.0	12.6	11.4	10.9	10.3
German Empire	12.0	13.1	11.5	11.4	10.6
Austria	6.8	8.2	7.0	8.3	8.0
Italy	6.3	7.4	10.3	9.4	9.0
France	0,6	2.9	2.9	2.6	2.6
Belgium	9.0	10.2	10.5	11.1	9.8
Holland	10.5	13.5	13.6	14.7	12.6
England	15.4	14.6	15.0	14.1	12.7
Denmark	11.2	12.5	13.9	12.9	13.3
Sweden	12.4	12.1	11.4	12.0	11.6
Norway	12.7	15.0	12.6	12.6	13.9

Statement showing percentage of illegitimate children born in Switzerland, by cantons, since 1871.

Cantons.	1871-'75.	1876-'80.	1881.	1882.	1883.	1884.
Zurich	1.7	5.2	5.1	5.4	5.8	5.7
Berne	5.7	5.6	5.7	5.4	5.7	5.5
Lucerne	7.5	4.9	5.0	5.8	5.2	5.3
Uri	2.8	3.2	5.8	4.8	8.7	2.4
Schwyz	8.1	2.6	8.2	8.0	8.2	2.2
Unterwalden, Upper	8.8	2.4	1.6	8.0	2.1	2.4
Unterwalden, Lower	3.1	2.8	2.4	2.8	2.4	2.5
Glarus	1.1	1.9	1.8	1.8	1.2	1.5
Zug	2.7	1.9	2.2	1.9	1.6	2.4
Freiburg	6.4	6.4	5.8	6.1	6.4	6.6
Solothurn	6.2	4.8	4.7	5.1	4.8	3.7
Basel-Stadt	11.9	11.2	8.6	11.2	10.8	10.1
Basel-Land	8.9	3.5	8.1	3.8	8.1	2.7
Schaffhausen	4.4	4.5	8.6	4.5	8.5	4.9
Appenzell, Outer Rhodes	8.5	8.3	4.0	2.9	8.2	8.8
Appenzell, Inner Rhodes	1.8	2.0	1.9	2.0	1.4	2.1
St. Galle	8.0	3.1	3.6	8.8	8.9	8.8
Graubünden	8.9	4.1	4.2	4.2	8.2	4.7
Aargau	4.6	8.7	8.4	8.4	8.6	8.7
Thurgau	3.4	8.5	8.6	3.7	8.4	4.5
Tessin	2.0	3.5	1.2	8.4	2.6	8.0
Waadt	5.4	5.1	5.2	5.6	5.5	5.1
Wallis	8.7	3.8	3.9	8.8	4.5	3.7
Neufchatel	4.5	4.3	4.6	5.0	3.8	5.3
Geneva	12.0	10.5	11.2	12.1	11.4	11.5
Total	5.0	5.0	4.8	5.0	5.0	5.0

Statement showing percentage of illegitimate births in Switzerland, as compared with other lands.

Land.	1871-'75.	1876-'80.	1881.	1882.	1883.
Switzerland	5.0	5.0	4.8	5.0	5.0
Prussia	7.5	7.6	7.8	8.1	8.1
Bavaria	13.8	12.9	13.5	13.6	13.2
Saxony	13.3	12.6	12.8	13.2	12.9
Wurtemberg	9.6	8.3	8.9	8.9	8.0
German Empire	....	8.8	9.1	9.3	9.2
Austria	12.4	14.0	14.5	14.6	14.6
Italy	7.1	7.3	7.4	7.6	7.9
France	7.5	7.4	7.8	7.9	.....
Belgium	7.1	7.5	7.9	8.2	8.1
Holland	3.5	3.2	2.9	3.0	3.1
England	5.3	4.8	4.9	4.9	4.8
Denmark	11.2	10.2	10.0	10.6	.....
Sweden	10.9	10.1	10.1	10.3	10.2
Norway	9.2	8.5	9.4	8.2	......

Statistics of suicide in Switzerland.

Manner of suicide.	1881.	1882.	1883.	1884.		
				Male.	Female.	Total.
Drowning	675	688	682	119	49	168
Poison				14	5	19
Coal gas				4	1	5
Hanging				251	25	276
Shooting				116	3	119
Cutting or stabbing				23	4	27
Throwing self down				5	9	14
Railway				15	1	16
Not definitely stated				3	....	3
Total	675	688	682	550	97	647

REMARKS.—In 1884 the percentage of suicides in Switzerland was 2.2 to every 10,000 inhabitants. The percentage in Saxony is 3.9; in Baden, 1.7; in Wurtemberg, 1.7; in Prussia, 1.9; in France, 1.9; in Austria, 1.6; in England, 0.7.

THE UNITED KINGDOM.

REPORT OF CONSUL HALE.

STATISTICS.

The statistics of emigration from the United Kingdom are obtained by the Government from records required to be kept by the emigration officers at the ports of embarkation. No effort is made to keep separate records for the movement from the different counties or districts, otherwise than to discriminate between the three chief divisions of the Kingdom, England (including Wales), Scotland, and Ireland, and foreigners, the latter meaning chiefly persons from the continent of Europe who ship from British and Irish ports. Even this discrimination was not made until 1853; no record was kept of the return immigration until 1870, and no discrimination between nationalities in the latter until 1876.

The statistics for this district, therefore, can only be inferred from those for the country at large, and these it will be necessary to consider first.

The last annual report of Mr. Giffen, the statistician of the Board of Trade, made to that body in February, contained the following tables:

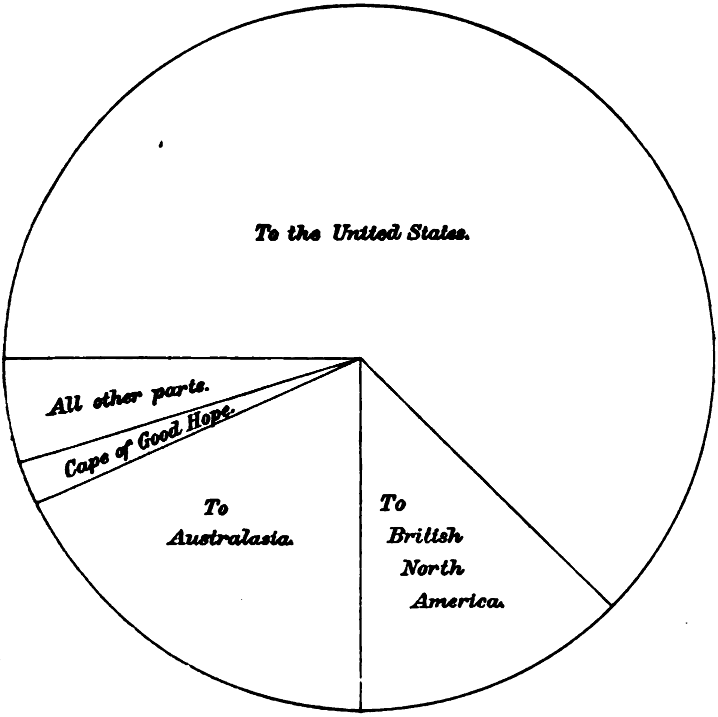
I.—*Account of the numbers, nationalities, and destinations of passengers leaving the United Kingdom for places out of Europe, in* 1885, *in vessels under the passengers acts; including also passengers for places out of Europe, in vessels not under the acts, as far as the same have been recorded.*

Nationality.	To United States.	To British North America.	To Austraaslia.	To Cape of Good Hope and Natal.	To all other places.	Total. 1885.	Total. 1884.
English	73, 789	14, 817	28, 380	2, 954	6, 320	126, 260	147, 660
Scotch	13, 241	2, 345	4, 731	275	775	21, 367	21, 953
Irish	50, 657	2, 676	6, 284	39	361	60, 017	72, 566
Total British	137, 687	19, 838	39, 395	3, 268	7, 456	207, 644	242, 179
Foreigners	46, 779	3, 090	1, 294	692	1, 928	53, 783	57, 733
Not distinguished	4	....	....	....	2, 954	2, 958	3, 989
Grand total	184, 470	22, 928	40, 689	3, 960	12, 338	264, 385	303, 901

Cabin and steerage passengers.

Port of departure.	Cabin.	Steerage.	Total.	Port of departure.	Cabin.	Steerage.	Total.
Liverpool	29, 854	115, 916	145, 270	Belfast	520	2, 518	3, 038
London	11, 506	25, 389	36, 895	Queenstown	428	27, 931	28, 359
Plymouth and Dartmouth	1, 511	9, 378	10, 889	Londonderry	327	8, 624	8, 951
Southampton	5, 024	1, 268	6, 292	Galway	......	864	864
Glasgow and Greenock	2, 650	20, 777	23, 427	All other ports	108	292	400
				Total	51, 428	212, 957	264, 385

DISTRIBUTION OF EMIGRATION FROM THE UNITED KINGDOM IN 1884.



II.—*Account of the numbers of passengers as in the preceding table, showing the principal ports of the United Kingdom from which they embarked in* 1885, *with their principal places of destination.*

Name of port.	To United States.	To British North America.	To Australia and New Zealand.	To East Indies.	To British West Indies.	To Cape of Good Hope and Natal.	To Central and South America.	To all other places.	Total.
English ports:									
Liverpool	123,295	17,460	178	1,624	44	......	1,616	1,058	145,270
London	1,751	883	28,636	2,578	278	1,748	17	1,004	36,895
Plymouth and Dartmouth	110	93	9,894	......	......	678	......	114	10,889
Southampton	887	......	......	......	1,064	1,534	2,288	519	6,292
Other ports in England	237	141	......	......	......	......	8	3	389
Total from ports in England	126,280	18,577	38,703	4,202	1,386	3,960	3,929	2,698	199,735
Scotch ports:									
Glasgow and Greenock	19,264	2,054	1,986	9	93	......	......	21	23,427
Other ports in Scotland	10	1	......	......	......	......	......	......	11
Total from ports in Scotland	19,274	2,055	1,966	9	93	......	......	21	23,438
Irish ports:									
Belfast	2,728	310	......	......	......	......	......	......	3,038
Queenstown	28,074	285	......	......	......	......	......	......	28,359
Londonderry	7,250	1,701	......	......	......	......	......	......	8,951
Galway	864	......	......	......	......	......	......	......	864
Other ports in Ireland	......	......	......	......	......	......	......	......	......
Total from ports in Ireland	38,916	2,296	......	......	......	......	......	......	41,212
Grand total	184,470	22,928	40,689	4,211	1,479	3,960	3,929	2,719	264,385

III.—*Account of the number of passengers of each sex, as in the first table, distinguishing the nationalities, and the countries to which they emigrated in* 1885.

Nationality and sex.	To United States.	To British North America.	To Australia and New Zealand.	To East Indies.	To British West Indies.	To Cape of Good Hope and Natal.	To Central and South America.	To all other places.	Total.
English:									
Males	46,142	9,528	17,336	1,207	671	1,796	1,413	734	78,827
Females	27,647	5,239	11,044	849	430	1,158	608	408	47,433
Total	73,789	14,817	28,380	2,056	1,101	2,954	2,021	1,142	126,260
Scotch:									
Males	8,070	1,479	2,849	191	65	178	138	131	13,101
Females	5,171	866	1,882	105	31	97	65	49	8,266
Total	13,241	2,345	4,731	296	96	275	203	180	21,367
Irish:									
Males	24,346	1,590	3,651	95	14	23	68	31	29,818
Females	26,311	1,086	2,633	88	12	16	31	22	30,199
Total	50,657	2,676	6,284	183	26	39	99	53	60,017
Of British origin:									
Males	78,558	12,597	23,836	1,493	750	1,997	1,619	896	121,746
Females	59,129	7,241	15,559	1,042	473	1,271	704	479	85,898
Total	137,687	19,838	39,395	2,535	1,223	3,268	2,323	1,375	207,644
Foreigners:									
Males	29,754	1,980	804	46	128	464	846	216	34,238
Females	17,025	1,110	490	42	85	228	472	93	19,545
Total	46,779	3,090	1,294	88	213	692	1,318	309	53,783
Nationality not distinguished:									
Males	3	....	....	821	30	......	200	831	1,885
Females	1	....	....	767	13	.....	88	204	1,073
Total	4	....	....	1,588	43	......	288	1,035	2,958
Total males	108,315	14,577	24,640	2,360	908	2,461	2,665	1,943	157,869
Total females	76,155	8,351	16,049	1,851	571	1,499	1,264	776	106,516
Grand total	184,470	22,928	40,689	4,211	1,479	3,960	3,929	2,719	264,385

IV.—*An account in detail of the number and destination of passengers leaving the United Kingdom in 1885, as in the first table, showing the numbers of adults and children of each sex, and the conjugal conditions of the adults; these particulars being stated for English, Scotch, and Irish passengers separately and in the aggregate, and also for foreigners and other persons whose nationality has not been distinguished separately.*

Description of emigrant.	Destination.								
	United States.	British North America.	Australia and New Zealand.	East Indies.	British West Indies.	Cape of Good Hope and Natal.	Central and South America.	All other places.	Total.
English.									
Adults:									
Married—									
Males	8, 125	1, 630	3, 661	309	231	604	442	256	15, 048
Females	11, 203	1, 842	4, 079	394	201	474	262	187	18, 642
Single—									
Males	31, 444	6, 543	11, 091	655	357	963	824	420	52, 297
Females	10, 484	2, 049	4, 201	334	175	445	230	173	18, 091
Total adults	61, 256	12, 064	22, 732	1, 782	964	2, 486	1, 758	1, 036	104, 078
Children from one to twelve years and infants:									
Males	6, 573	1, 355	2, 884	153	83	220	147	58	11, 482
Females	5, 960	1, 398	2. 764	121	54	239	116	48	10, 700
Total English	73, 789	14, 817	28, 380	2, 056	1, 101	2, 954	2, 021	1, 142	126, 260
Scotch.									
Adults:									
Married—									
Males	926	207	550	114	14	55	37	35	1, 938
Females	1, 966	277	602	57	14	50	30	25	3, 021
Single—									
Males	5, 689	907	1, 773	71	44	111	87	87	8, 769
Females	1, 877	311	829	34	8	34	17	17	3, 127
Total adults	10, 458	1, 702	3, 754	276	80	250	171	164	16. 855
Children from one to twelve years and infants:									
Males	1, 455	365	526	6	7	12	14	9	2, 394
Females	1, 328	278	451	14	9	13	18	7	2, 118
Total Scotch	13, 241	2, 345	4, 731	296	96	275	203	180	21, 367
Irish.									
Adults:									
Married—									
Males	1, 977	205	369	64	7	5	16	15	2, 658
Females	3, 401	290	394	51	6	6	10	10	4, 168
Single—									
Males	19, 304	1, 124	2, 982	26	1	14	48	12	23, 511
Females	19, 823	592	1, 983	27	4	6	18	10	22, 463
Total adults	44, 505	2, 211	5, 728	168	18	31	92	47	52, 800
Children from one to twelve years and infants:									
Males	3, 065	261	300	5	6	4	4	4	3, 649
Females	3, 087	204	256	10	2	4	3	2	3, 568
Total Irish	50, 657	2, 676	6, 284	183	26	39	99	53	60, 017
Of British origin.									
Adults:									
Married—									
Males	11, 028	2, 042	4, 280	577	252	664	495	306	19, 644
Females	16, 570	2, 409	5, 075	502	221	530	302	222	25, 831
Single—									
Males	5, 437	8, 574	15, 846	752	402	1, 088	959	519	84, 577
Females	36, 184	2, 952	7, 013	895	187	485	265	200	43, 681
Total adults	116, 219	15, 977	32, 214	2, 226	1, 062	2, 767	2, 021	1, 247	173, 733
Children from one to twelve years and infants:									
Males	11, 093	1, 981	3, 710	164	96	245	165	71	17, 525
Females	10, 375	1, 880	3, 471	145	65	256	137	57	16, 386
Total British	137, 687	19, 838	39, 395	2, 535	1, 223	3, 268	2, 328	1, 375	207, 644

IV—*An account in detail of the number and destination of passengers leaving the United Kingdom in* 1885, *&c.*—Continued.

Description of emigrant.	Destination.								
	United States.	British North America.	Australia and New Zealand.	East Indies.	British West Indies.	Cape of Good Hope and Natal.	Central and South America.	All other places.	Total.
Foreigners.									
Adults:									
Married—									
Males	4,070	340	137	24	59	153	339	70	5,192
Females	5,049	407	155	5	38	88	197	37	5,976
Single—									
Males	21,010	1,190	484	21	53	274	367	134	23,533
Females	8,218	364	177	35	36	86	128	47	9,091
Total adults	38,347	2,301	953	85	186	601	1,031	288	43,792
Children from one to twelve years, and infants:									
Males	44,674	450	183	1	16	37	140	12	5,513
Females	3,758	339	358	2	11	54	147	9	4,478
Total foreigners	46,779	3,090	1,294	88	213	092	1,318	309	53,783
Nationality not distinguished.									
Adults:									
Married—									
Males	......	......	......	211	10	......	81	341	593
Females	......	......	......	357	8	......	32	109	506
Single—									
Males	3	......	......	425	16	......	65	387	896
Females	1	......	......	306	8	......	22	67	399
Conjugal condition not stated—									
Males	......	......	......	88	......	......	78	59	175
Females	......	......	......	......	......	......	14	......	14
Total adults	4	......	......	1,337	37	......	242	963	2,583
Children from one to twelve years and infants:									
Males	......	......	......	147	4	......	26	44	221
Females	......	......	......	104	2	......	20	28	154
Total nationality not distinguished	4	......	......	1,588	43	......	288	1,035	3,958
Total adults:									
Married—									
Males	15,098	2,382	4,417	812	821	817	895	717	25,429
Females	21,619	2,816	5,230	864	267	618	531	368	32,313
Single—									
Males	77,450	9,764	16,330	1,298	471	1,362	1,891	1,040	109,006
Females	40,403	3,316	7,190	736	226	571	415	314	53,171
Conjugal condition not stated—									
Males	......	......	......	88	......	......	78	59	175
Females	......	......	......	......	......	......	14	......	14
Total adults	154,570	18,278	33,167	3,648	1,285	3,368	3,294	2,498	220,108
Children from one to twelve years and infants:									
Males	15,767	2,431	3,893	312	116	282	331	127	23,259
Females	14,133	2,219	3,629	251	78	310	304	94	21,018
Grand total	184,470	22,928	40,689	4,211	1,479	3,960	3,929	2,719	264,385

V.—*Statement of occupations and general destination of adult* passengers of each sex leaving the United Kingdom in* 1885, *as in the first table, so far as can be ascertained.*

Occupation.	British and Irish origin.					Foreigners.				
	United States.	British North America.	Australasia.	All other places.	Total.	United States.	British North America.	Australasia.	All other places.	Total.
Adult males.										
Agricultural laborers, gardeners, carters, &c	5,450	351	3,258	28	9,087	645	10	55	8	718
Bakers, confectioners, &c	94	2	324	10	430	9	......	12	4	25
Blacksmiths and farriers	79	5	158	8	250	4	......	3	......	7
Boot and shoe makers	80	3	162	34	279	12	......	11	1	24
Braziers, tinsmiths, white smiths, &c	17	......	48	3	68	8	......	......	......	8
Brick and tile makers, potters, &c	16	......	29	......	45	1	......	......	......	1
Bricklayers, masons, plasterers, slaters, &c	671	17	390	20	1,098	70	......	16	8	94
Builders	34	......	83	2	119	1	......	3	1	5
Butchers, poulterers, &c	111	1	82	4	198	20	1	2	......	23
Cabinet-makers and upholsterers.	40	......	70	......	110	......	......	3	......	3
Carpenters and joiners	526	56	740	52	1,374	62	2	23	5	92
Clerks and agents	1,436	54	1,122	237	2,849	101	1	30	40	172
Clock and watch makers and jewelers	48	......	27	16	91	19	......	2	5	26
Coach makers and trimmers	6	......	33	......	39	1	......	......	1	2
Coopers	8	......	12	......	20	......	......	1	......	1
Domestic servants	305	12	132	46	495	69	......	3	19	91
Engine drivers, stokers, &c	45	......	87	10	142	6	......	2	......	8
Engineers	183	9	301	181	674	5	......	5	36	46
Farmers and graziers	3,518	285	1,219	201	5,223	1,550	17	30	148	1,745
Founders, iron and brass, molders, &c	52	......	62	2	116	3	......	3	1	7
Gentlemen, professional men, merchants, &c	3,736	1,998	1,649	2,058	9,441	771	2	23	289	1,085
Laborers, general	25,506	4,144	3,017	140	32,807	15,514	773	174	43	16,504
Mechanics	3,731	123	528	91	4,473	821	......	15	49	885
Millers, malsters, &c	40	2	37	3	82	35	......	1	1	37
Miners and quarrymen	2,257	1	860	207	3,325	711	......	12	62	785
Painters, paper-hangers, plumbers, and glaziers	314	2	285	1	602	62	......	10	......	72
Printers	58	2	65	14	139	12	......	2	3	17
Saddlers and harness-makers	18	1	21	4	44	1	......	1	......	2
Sawyers	15	......	19	......	34	......	......	......	......	......
Seamen	186	41	93	10	330	30	......	22	10	62
Shipwrights	10	......	18	......	28	......	......	......	......	......
Shopkeepers, shopmen, warehousemen, &c	480	25	602	158	1,265	32	......	16	61	109
Smiths, general	97	1	29	5	132	44	......	2	1	47
Spinners and weavers	198	2	30	1	231	28	......	3	......	31
Tailors	123	4	137	54	318	68	......	8	2	78
Tanners and curriers	15	......	12	1	28	4	......	......	......	4
Turners	21	......	12	......	33	5	......	......	......	5
Wheelwrights and millwrights	12	......	38	......	50	......	......	2	......	2
Army and Navy:										
Officers	1	8	9	309	327	1	......	......	......	1
Men	3	7	19	18	47	......	......	......	......	......
Other trades and professions	622	6	466	205	1,299	182	1	24	39	246
Males, occupation not stated	17,303	3,454	3,841	1,881	26,479	4,173	723	102	657	5,655
Adult females.										
Domestic and farm servants, nurses, &c	14,915	550	3,920	208	19,593	3,070	177	114	99	3,460
Gentlewomen and governesses	52	2	58	33	145	6	......	......	5	11
Milliners, dressmakers, needlewomen, &c	357	3	136	41	537	85	......	1	2	88
Shopwomen	23	......	15	7	45	3	......	......	......	3
Spinners and weavers	78	1	13	......	92	3	......	......	......	3
Other trades and professions	83	6	98	78	265	35	......	3	32	70
Females, occupation not stated	33,246	4,799	7,853	2,937	48,835	10,065	594	214	550	11,422
Total adults	116,219	15,977	32,214	9,323	173,733	38,347	2,301	958	2,191	43,792

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* According to the passengers acts, all persons of twelve years of age and upwards are considered as adults.

V.—*Statement of occupations, &c.*—Continued.

Occupation.	Nationality not distinguished.			Total.				
	United States.	All other places.	Total.	United States.	British North America.	Australasia.	All other places.	Total.
Adult males.								
Agricultural laborers, gardeners, carters, &c	....	......	......	6,095	361	3,313	36	9,805
Bakers, confectioners, &c	....	......	......	103	2	336	14	455
Blacksmiths and farriers	....	......	......	83	5	161	8	257
Boot and shoe makers	....	......	......	92	3	173	35	303
Braziers, tinsmiths, whitesmiths, &c	....	......	......	25	......	47	3	76
Brick and tile-makers, potters, &c	....	......	......	17	......	29	......	46
Bricklayers, masons, plasterers, slaters, &c	....	......	......	741	17	406	28	1,192
Builders	....	......	......	35	......	86	3	124
Butchers, poulterers, &c	....	......	......	131	2	84	4	221
Cabinet-makers and upholsterers	....	......	......	40	......	73	......	113
Carpenters and joiners	....	1	1	588	58	763	58	1,467
Clerks and agents	....	180	180	1,537	55	1,152	407	3,151
Clock and watch makers and jewelers	....	......	......	67	......	29	21	117
Coach makers and trimmers	....	......	......	7	......	33	1	41
Coopers	....	......	......	8	......	13	......	21
Domestic servants	....	20	20	374	12	135	85	606
Engine drivers, stokers, &c	....	......	......	51	......	89	10	150
Engineers	....	23	23	188	9	306	240	743
Farmers and graziers	....	......	......	5,068	302	1,249	349	6,968
Founders, iron and brass, molders, &c	....	......	......	55	......	65	3	123
Gentlemen, professional men, merchants, &c	1	442	443	4,508	2,000	1,672	2,789	10,969
Laborers, general	....	1	1	41,020	4,917	3,191	184	49,312
Mechanics	....	4	4	4,552	123	543	144	5,362
Millers, maltsters, &c	....	......	......	75	2	38	4	119
Miners and quarrymen	....	1	1	2,968	1	872	270	4,111
Painters, paper-hangers, plumbers, and glaziers	....	......	......	376	2	295	1	674
Printers	....	......	......	70	2	67	17	156
Saddlers and harness-makers	....	......	......	19	1	22	4	46
Sawyers	....	......	......	15	......	19	......	34
Seamen	....	5	5	216	41	115	25	397
Shipwrights	....	......	......	10	......	18	......	28
Shopkeepers, shopmen, warehousemen, &c	....	......	......	512	25	618	219	1,374
Smiths, general	....	......	......	141	1	31	6	179
Spinners and weavers	....	......	......	226	2	33	1	262
Tailors	....	......	......	191	4	145	56	396
Tanners and curriers	....	......	......	19	......	12	1	32
Turners	....	......	......	26	......	12	......	38
Wheelwrights and millwrights	....	......	......	12	......	40	......	52
Army and navy, officers	....	72	72	2	8	9	381	400
Army and navy, men	....	7	7	3	7	19	25	54
Other trades and professions	....	16	16	804	7	490	260	1,561
Males, occupation not stated	2	939	941	21,478	4,177	3,943	3,477	33,075
Adult females.								
Domestic and farm servants, nurses, &c	....	122	122	17,985	727	4,034	429	23,175
Gentlewomen and governesses	....	2	2	58	2	53	45	158
Milliners, dressmakers, needlewomen, &c	....	......	......	442	3	137	43	625
Shopwomen	....	......	......	26	......	15	7	48
Spinners and weavers	....	......	......	81	1	13	......	95
Other trades and professions	....	24	24	118	6	101	134	359
Females, occupation not stated	1	770	771	43,312	5,393	8,067	4,266	61,038
Total adults	4	2,579	2,583	154,570	18,278	33,167	14,093	220,108

VI.—*Statement of sums of money recovered for emigrants by the emigration officers during the year* 1885, *under the forty-ninth section of the passengers act,* 1855, *without resort to legal proceedings.*

Emigration officers at—	Amounts recovered.
	£ s. d.
Liverpool	486 12 0
London	347 15 11
Glasgow	186 6 8
Londonderry	90 1 5
Total	1,110 16 00

VII.—*Amount of money remitted by settlers in the United States and British North America to their friends in the United Kingdom, in each year from* 1848 (*the first year for which there is any information*) *to* 1885, *both inclusive, as far as ascertained.*[*]

Year.	Amount.	Year.	Amount.	Year.	Amount.
1848	£460,000	1862	£360,578	1876	£449,641
1849	540,000	1863	383,286	1877	667,564
1850	957,000	1864	332,172	1878	784,067
1851	990,000	1865	481,580	1879	855,631
1852	1,404,000	1866	498,028	1880	1,403,841
1853	1,439,000	1867	543,029	1881	1,505,794
1854	1,730,000	1868	580,564	1882	1,573,552
1855	873,000	1869	639,335	1883	1,611,201
1856	951,000	1870	727,408	1884	1,575,756
1857	593,165	1871	702,488	1885	1,241,585
1858	472,610	1872	749,664		
1859	520,019	1873	724,040	Total	31,018,587
1860	534,476	1874	485,566		
1861	374,061	1875	354,356		

VIIA.—*Amount of money remitted by settlers in Australia and other places to their friends in the United Kingdom, in each year from* 1875 (*the first year for which there is any information*) *to* 1885, *both inclusive, as far as ascertained.*[*]

Year.	Amount.	Year.	Amount.	Year.	Amount.
1875	£7,999	1880	71,407	1885	51,824
1876	25,745	1881	71,013	Total	637,259
1877	77,052	1882	125,206		
1878	51,602	1883	63,289		
1879	51,378	1884	61,244		

[*] The information given in Tables VII and VIIA was obtained through the courtesy of banks and mercantile houses, but there are no means of ascertaining the amount of money sent through private hands and such mercantile houses as declined to give the information.

VIII.—*Account of the number of persons that arrived in this country from places out of Europe, so far as recorded, showing their nationality and the countries whence they came, in* 1885.

Nationality.	Countries whence arrived.					Total, 1885.	Total, 1884.
	United States.	British North America.	Australasia.	Cape of Good Hope and Natal.	All other places.		
British and Irish	57,604	9,321	7,946	4,574	6,023	85,468	91,356
Foreigners	23,846	758	326	898	1,178	27,006	32,007
Not distinguished	....	....	....	....	1,075	1,075	103
Total	81,450	10,079	8,272	5,472	8,276	113,549	123,466

IX.—*Balance of recorded emigration and immigration to and from the following places in* 1885.

Country.	Comparing total emigration with total recorded immigration.				Comparing emigration and immigration of persons of British and Irish origin only.			
	Emigrants.	Immigrants.	Excess of—		Emigrants.	Immigrants.	Excess of—	
			Emigrants.	Immigrants.			Emigrants.	Immigrants.
United States	184,470	81,450	103,020	....	137,687	57,604	80,083	....
British North America	22,928	10,079	12,849	....	19,838	9,321	10,517	....
Australasia	40,689	8,272	32,417	....	39,395	7,946	31,449	....
Cape of Good Hope and Natal	3,960	5,472	....	1,512	3,268	4,574	....	1,306
All other places	12,338	8,276	4,062	....	7,456	6,023	1,433	....
Total	264,385	113,549	150,836	....	207,644	85,468	122,176	....

X.—*Account showing the sex and nationality of the immigrants that arrived in this country from places out of Europe in 1885, and the countries whence they came.*

Description of immigrants.	Countries whence arrived.					Total.
	United States.	British North America.	Australasia.	Cape of Good Hope and Natal.	All other places.	
British and Irish origin.						
Adults:						
Males	33,878	5,653	4,565	2,555	3,318	49,969
Females	16,998	2,456	2,229	1,098	1,584	24,365
Children:						
Males	3,457	648	593	451	577	5,726
Females	3,271	564	559	470	544	5,408
Total:						
Males	37,335	6,301	5,158	3,006	3,895	55,695
Females	20,269	3,020	2,788	1,568	2,128	29,773
Total British and Irish	57,604	9,321	7,946	4,574	6,023	85,468
Foreigners.						
Adults:						
Males	15,338	608	216	604	717	17,483
Females	6,468	86	65	156	359	7,134
Children:						
Males	1,043	35	17	84	63	1,242
Females	997	29	28	54	39	1,147
Total:						
Males	16,381	643	233	688	780	18,725
Females	7,465	115	93	210	398	8,281
Total foreigners	23,846	758	326	898	1,178	27,006
Nationality not distinguished.						
Adults:						
Males	....	....	....	....	842	842
Females	....	....	....	....	151	151
Children:						
Males	....	....	....	....	44	44
Females	....	....	....	....	38	38
Total:						
Males	....	....	....	....	886	886
Females	....	....	....	....	189	189
Total nationality not distinguished.	....	....	....	....	1,075	1,075
Total.						
Adults:						
Males	49,216	6,261	4,781	3,159	4,877	68,294
Females	23,466	2,542	2,294	1,254	2,094	31,650
Children:						
Males	4,500	683	610	535	684	7,012
Females	4,268	593	587	524	621	6,593
Total:						
Males	53,716	6,944	5,391	3,694	5,561	75,306
Females	27,734	3,135	2,881	1,778	2,715	38,243
Grand total	81,450	10,079	8,272	5,472	8,276	113,549

XI.—*General statement of emigration from the United Kingdom from* 1815 *to* 1885, *including British subjects and foreigners, with the destination of the emigrants.*

[Prior to 1853 the nationalities were not distinguished, and this table is divided into two periods, one before the other after 1853, so as to facilitate comparison with the succeeding table, which shows the emigration of persons of British origin only.]

Year or period.	United States.	British North America.	Australia.	All other places.	Total.
1815–'20 (inclusive)	50,359	70,438	(*)	2,731	123,528
1821–'30 (inclusive)	99,801	139,269	*6,417	1,805	247,292
1831–'40 (inclusive)	308,247	322,485	67,882	4,536	703,150
1841–'50 (inclusive)	1,094,556	429,044	127,124	34,168	1,684,892
1851	267,357	42,605	21,532	4,472	335,966
1852	244,261	32,873	87,881	3,749	368,746
Total, 1815–'52	2,064,581	1,036,714	310,836	51,461	3,463,592
Total, 1853–'60	983,625	159,807	397,889	41,654	1,582,475
Total, 1861–'70	1,424,466	195,250	280,198	67,656	1,967,570
1871	198,843	32,671	12,227	8,694	252,435
1872	233,747	32,205	15,876	13,385	295,213
1873	233,073	37,208	26,428	13,903	310,612
1874	148,161	25,450	53,958	13,445	241,014
1875	105,046	17,378	35,525	15,860	173,809
1876	75,533	12,327	33,191	17,171	138,222
1877	64,027	9,289	31,071	15,584	119,971
1878	81,557	13,836	37,214	15,056	147,663
1879	134,590	22,509	42,178	17,886	217,163
1880	257,274	29,340	25,438	20,242	332,294
Total, 1871–'80	1,531,851	232,213	313,106	151,226	2,228,396
1881	307,973	34,561	24,093	25,887	392,514
1882	295,539	53,475	38,604	25,670	413,288
1883	252,226	53,566	73,017	18,348	397,157
1884	203,519	37,043	45,944	17,395	303,901
1885	184,470	22,928	40,689	16,298	264,385
Total, 1853–'85	5,183,669	788,843	1,213,040	364,134	7,549,686
Grand total, 1815–'85	7,248,250	1,825,557	1,523,876	415,595	11,013,278

*The customs returns do not record any emigration to Australia during the years 1815 to 1824, inclusive, but it appears from other sources that there went out in 1821, 320; in 1822, 875; in 1823, 543; in 1824, 780, and in 1825, 458 persons. These numbers have not been included in the totals of this table.

XII.—*Statement showing the number and percentage of persons of British and Irish origin only, who left the United Kingdom for the United States, British North America, Australasia, and all other places, in each year from* 1853 *to* 1885, *inclusive.*

[Prior to 1853 the nationalities were not given.]

Years.	United States.		British North America.		Australasia.		All other places.		Total.
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	
1853	190,952	69	31,779	11	54,818	20	580	......	278,129
1854	153,627	58	35,679	13	77,256	29	215	......	267,047
1855	86,239	57	16,110	11	47,284	32	390	......	150,023
1856	94,931	64	11,299	8	41,329	28	725	......	148,284
1857	105,516	58	16,803	9	57,858	32	874	1	181,051
1858	49,356	52	6,504	7	36,454	38	2,753	3	95,067
1859	57,096	59	2,469	3	28,604	29	8,924	9	97,093
1860	67,879	71	2,765	3	21,434	22	3,911	4	95,989
Total, 1853–1860	805,596	61	123,408	10	365,307	28	18,372	1	1,312,683
1861	38,160	58	3,953	6	20,597	32	2,487	4	65,197
1862	48,726	50	8,328	8	38,828	40	1,881	2	97,763
1863	130,528	68	9,665	5	50,157	26	2,514	1	192,864
1864	130,165	70	11,371	6	40,078	21	5,472	3	187,081
1865	118,463	68	14,424	8	36,683	21	5,321	3	174,891
1866	131,840	77	9,988	6	23,682	14	4,543	3	170,053
1867	126,051	80	12,160	8	14,023	9	4,748	3	156,982
1868	108,490	78	12,332	9	12,332	9	5,033	4	138,187
1869	146,737	79	20,921	11	14,457	8	4,185	2	186,300
1870	153,466	76	27,168	13	16,526	8	5,351	3	205,511
Total, 1861–1870	1,132,626	72	130,310	8	267,358	17	41,535	3	1,571,829
1871	150,788	78	24,954	13	11,695	6	5,314	3	192,751
1872	161,782	77	24,382	12	15,248	7	9,082	4	210,494
1873	166,730	63	29,045	13	25,137	11	7,433	3	228,345
1874	113,774	58	20,728	10	52,581	27	10,189	5	197,272
1875	81,193	58	12,306	9	34,750	24	12,426	9	140,675
1876	54,554	50	9,335	9	32,196	29	13,384	12	109,469
1877	45,481	48	7,720	8	30,138	32	11,856	12	95,195
1878	54,694	49	10,652	9	36,479	32	11,077	10	112,902
1879	91,806	56	17,952	11	40,959	25	13,557	8	164,274
1880	166,570	73	20,902	9	24,184	11	15,886	7	227,542
Total, 1871–1880	1,087,372	65	177,976	11	303,367	18	110,204	6	1,678,919
1881	176,104	73	23,912	10	22,682	9	20,304	8	243,002
1882	181,903	65	40,441	15	37,289	13	19,733	7	279,366
1883	191,573	60	44,185	14	71,264	22	13,096	4	320,118
1884	155,280	64	31,134	13	44,256	18	11,510	5	242,179
1885	137,687	66	19,838	10	39,395	19	10,724	5	207,644
Grand total, 1853–'85	3,868,141	66	591,204	10	1,150,917	20	245,478	4	5,855,740

XIII.—*Statement showing the proportion to the population of the emigration from the United Kingdom of persons of British origin only, for each year from* 1853 *to* 1885, *inclusive, with the averages for each quinquennial and decennial period.*

[This table shows the gross emigration only, and is subject to the qualification that recorded immigration in recent years is much larger than formerly.]

Year or quinquennial period.	Estimated population at middle of each year and quinquennial or other period.	Emigration of each year and average annual emigration of quinquennial or other period.	Proportion of emigration to population.
			P. ct.
1853	27,542,588	278,129	1.01
1854	27,658,704	207,047	.97
1855	27,821,730	150,023	.54
Average, 1853–'55.	27,674,841	231,733	.84
1856	28,011,034	148,284	.53
1857	28,188,280	181,051	.64
1858	28,389,770	95,067	.33
1859	28,590,224	97,093	.34
1860	28,778,411	95,989	.33
Average, 1856–'60.	28,391,544	123,497	.43
Average, 1853'–60.	28,122,593	164,085	.58
1861	28,977,133	65,197	.22
1862	29,243,610	97,763	.33
1863	29,470,969	192,864	.65
1864	29,680,437	187,081	.63
1865	29,925,177	174,891	.58
Average, 1861–'65.	29,459,465	143,559	.48
1866	30,147,755	170,053	.56
1867	30,409,132	156,982	.52
1868	30,689,977	138,187	.45
1869	30,978,278	186,300	.60
1870	31,256,535	202,511	.65
Average, 1866–'70.	30,696,335	170,807	.56
Average, 1861–'70.	30,077,900	157,183	.52
			P. ct.
1871	31,555,694	192,751	.61
1872	31,874,183	210,494	.66
1873	32,177,550	228,345	.71
1874	32,501,517	197,272	.61
1875	32,838,758	140,675	.43
Average, 1871–'75	32,189,540	193,907	.60
1876	33,199,994	109,469	.33
1877	33,575,941	95,195	.28
1878	33,943,773	112,902	.33
1879	34,302,557	164,274	.48
1880	34,622,930	227,542	.66
Average, 1876–'80.	33,929,039	141,876	.42
Average, 1871–'80.	33 059,290	167,892	.51
1881	34,952,204	243,002	.70
1882	35,297,114	279,366	.79
1883	35,611,770	320,118	.90
1884	35,961,540	242,179	.67
1885	36,325,115	207,644	.57
Average, 1881–'85.	35,629,549	258,462	.73
Average, 1876–'85.	34,779,294	200,169	.58

XIV.—*Statement showing in detail the destinations of persons who left the United Kingdom for places out of Europe since the* 1st *January,* 1853, *distinguishing English, Scotch, Irish, and foreigners.*

TO UNITED STATES.

Nationalities.	Annual average, 1853–'60.	Annual average, 1861–'70.	Annual average, 1871–'80.	1880.	1881.	1882.	1883.	1884.	1885.	Total for thirty-three years, 1853–'85.
Of British origin:										
English	24,460	36,511	54,975	69,081	90,527	94,599	93,392	83,324	73,789	1,546,185
Scotch	4,383	7,667	8,807	14,471	18,238	19,004	15,332	12,752	13,241	278,366
Irish	71,856	69,084	44,955	83,018	67,339	68,300	82,849	59,204	50,657	2,043,590
Total of British origin	100,699	113,262	108,737	166,570	176,104	181,903	191,573	155,280	137,687	3,868,141
Foreigners	12,059	22,837	41,886	88,801	129,701	112,709	60,068	48,206	46,779	1,141,166
Not distinguished	10,195	6,847	2,562	1,903	2,168	927	585	33	4	174,362
Total	122,953	142,446	153,185	257,274	307,973	295,539	252,226	203,519	184,470	5,183,669

XIV.—*Statement showing in detail the destinations of persons who left the United Kingdom for places out of Europe since the 1st of January,* 1853, *&c.*—Continued.

TO BRITISH NORTH AMERICA.

Nationalities.	Annual average, 1853-'60.	Annual average, 1861-'70.	Annual average, 1871-'80.	1880.	1881.	1882.	1883.	1884.	1885.	Total for thirty-three years, 1853-'85.
Of British origin:										
English	3,791	6,589	12,638	13,541	17,164	27,763	27,995	23,463	14,817	333,802
Scotch	3,550	2,434	2,581	3,221	3,182	4,630	3,871	3,163	2,345	95,748
Irish	8,085	4,008	2,578	4,140	3,566	8,048	12,319	4,508	2,676	161,659
Total of British origin	15,426	13,031	17,797	20,902	23,912	40,441	44,185	31,134	19,838	591,204
Foreigners	1,199	3,978	5,334	8,434	10,649	13,034	9,381	5,866	3,090	144,736
Not distinguished	3,351	2,516	89	4	......	......	......	43	......	52,908
Total	19,976	19,525	23,220	29,340	34,561	53,475	53,566	37,043	22,928	788,848

TO AUSTRALASIA.

Nationalities.	Annual average, 1853-'60.	Annual average, 1861-'70.	Annual average, 1871-'80.	1880.	1881.	1882.	1883.	1884.	1885.	Total for thirty-three years, 1853-'85.
Of British origin:										
English	27,311	14,211	20,035	15,176	15,704	24,345	50,201	30,967	28,380	710,542
Scotch	6,829	4,233	4,107	3,059	2,433	6,240	10,975	4,952	4,731	167,367
Irish	11,523	8,292	6,195	5,949	4,545	6,704	10,088	8,336	6,284	278,008
Total of British origin	45,663	26,736	30,337	24,184	22,682	37,289	71,264	44,255	39,395	1,150,917
Foreigners	1,077	574	928	1,253	1,410	1,307	1,753	1,659	1,294	31,185
Not distinguished	2,934	697	46	1	1	8	......	30	......	30,938
Total	49,674	28,020	31,311	25,438	24,093	38,604	73,017	45,944	40,689	1,213,040

TO ALL OTHER PLACES.

Nationalities.	Annual average, 1853-'60.	Annual average, 1861-'70.	Annual average, 1871-'80.	1880.	1881.	1882.	1883.	1884.	1885.	Total for thirty-three years, 1853-'85.
Of British origin:										
English	1,241	3,205	9,408	14,047	16,581	16,285	11,648	9,906	9,274	199,747
Scotch	428	474	1,070	1,305	2,973	2,368	961	1,086	1,050	27,314
Irish	627	474	542	534	750	1,080	487	518	400	18,417
Total of British origin	2,296	4,153	11,020	15,886	20,304	19,733	13,096	11,510	10,724	245,478
Foreigners	85	1,028	2,122	1,881	2,621	2,979	2,058	2,002	2,620	44,462
Not distinguished	2,826	1,584	1,980	2,475	2,962	2,958	3,194	3,883	2,954	74,194
Total	5,207	6,765	15,122	20,242	25,887	25,670	18,348	17,395	16,298	364,134

TO ALL PLACES.

Nationalities.	Annual average, 1853-'60.	Annual average, 1861-'70.	Annual average, 1871-'80.	1880.	1881.	1882.	1883.	1884.	1885.	Total for thirty-three years, 1853-'85.
Of British origin:										
English	56,803	60,517	97,056	111,845	139,976	162,992	183,236	147,660	126,260	2,790,276
Scotch	15,191	14,808	16,565	22,056	26,826	32,242	31,139	21,953	21,367	568,790
Irish	92,091	81,858	54,270	93,641	76,200	84,132	105,743	72,566	60,017	2,496,674
Total of British origin	164,085	157,183	167,891	227,542	243,002	279,366	320,118	242,179	207,644	5,855,740
Foreigners	14,419	28,431	50,270	100,369	144,381	130,029	73,260	57,733	53,783	1,361,549
Not distinguished	19,305	11,143	4,677	4,383	5,131	3,893	3,779	3,989	2,958	332,397
Total	197,809	196,757	222,838	332,204	392,514	413,288	397,157	303,901	264,385	7,549,686

XV.—*Statement showing the number of persons of English, Scotch, and Irish origin that left the United Kingdom for places out of Europe, with the proportion that the number of each nationality is of the total of such persons, in each of the years from* 1853 *to* 1885, *inclusive.*

Year or period.	**English.**		**Scotch.**		**Irish.**		**Total British and Irish.**
	Number.	**Percentage of total.**	**Number.**	**Percentage of total.**	**Number.**	**Percentage of total.**	
1853	62, 915	23	22, 605	8	192, 609	69	278, 129
1854	90, 966	34	25, 872	10	150, 209	56	267, 047
1855	57, 132	38	14, 037	9	78, 854	53	150, 023
Total, 1853–'55	211, 018	30	62, 514	9	421, 672	61	695, 199
1856	64, 527	44	12, 033	8	71, 724	48	148, 284
1857	78, 560	43	16, 253	9	86, 238	48	181, 051
1858	39, 971	42	11, 815	12	43, 281	46	95, 067
1859	33, 930	35	10, 182	10	52, 981	55	97, 093
1860	26, 421	28	8, 733	9	60, 835	63	95, 989
Total, 1856–'60	243, 409	39	59, 016	10	315, 059	51	617, 484
1861	22, 145	34	6, 730	10	36, 322	56	65, 197
1862	35, 487	36	12, 596	13	49, 680	51	97, 763
1863	61, 243	32	15, 230	8	116, 391	60	192, 864
1864	56, 618	30	15, 035	8	115, 428	62	187, 081
1865	61, 345	35	12, 870	7	100, 676	58	174, 891
Total, 1861–'65	236, 838	33	62, 461	9	418, 497	58	717, 796
1866	58, 856	35	12, 307	7	98, 890	58	170, 053
1867	55, 494	35	12, 866	8	88, 622	57	156, 982
1868	58, 268	42	14, 954	11	64, 965	47	138, 187
1869	90, 416	49	22, 559	12	73, 325	39	186, 300
1870	105, 293	52	22, 935	11	74, 283	37	202, 511
Total, 1866–'70	368, 327	43	85, 621	10	400, 085	47	854, 033
1871	102, 452	53	19, 232	10	71, 067	37	192, 751
1872	118, 190	56	19, 541	9	72, 763	35	210, 404
1873	123, 343	54	21, 310	9	83, 692	37	228, 345
1874	116, 490	59	20, 286	10	60, 496	31	197, 272
1875	84, 540	60	14, 686	10	41, 449	30	140, 675
Total, 1871–'75	545, 015	56	95, 055	10	329, 467	34	969, 537
1876	73, 396	67	10, 097	9	25, 976	24	109, 469
1877	63, 711	67	8, 653	9	22, 831	24	95, 195
1878	72, 323	64	11, 087	10	29, 492	26	112, 902
1879	104, 275	64	18, 703	11	41, 296	25	164, 274
1880	111, 845	49	22, 056	10	93, 641	41	227, 542
Total, 1876–'80	425, 550	60	70, 596	10	213, 236	30	709, 382
1881	139, 976	58	26, 826	11	76, 200	31	243, 002
1882	162, 992	58	32, 242	12	84, 132	30	279, 366
1883	183, 236	57	31, 139	10	105, 743	33	320, 118
1884	147, 660	61	21, 953	9	72, 566	30	242, 179
1885	126, 260	61	21, 367	10	60, 017	29	207, 644
Total, 1881–'85	760, 124	59	133, 527	10	398, 658	31	1, 292, 309
Grand total, 1853–'85 (33 years)	2, 790, 276	48	568, 790	10	2, 496, 674	42	5, 855, 740

XVI.—*Statement showing in detail, for English, Scotch, Irish, and foreign emigrants in each of the years* 1877 *to* 1885, *the number and sex of adult emigrants, the excess of males over females, and the number of children, compared with the total number of emigrants.*

Nationalities.	Years.	Total number of emigrants.	Adults.			Children and infants.	
			Males.	Females.	Excess of males over females.	Total number.	Proportion of children to total emigrants.
							Per cent.
English	1877	63,711	34,230	18,768	15,462	10,713	16.8
	1878	72,323	39,872	20,721	19,151	11,730	16.2
	1879	104,275	59,007	26,662	32,345	18,606	17.8
	1880	111,845	59,150	31,018	28,132	21,677	19.4
	1881	139,976	74,227	37,424	36,803	28,325	20.2
	1882	162,992	84,170	45,418	38,752	33,404	20.5
	1883	183,326	92,762	51,866	40,896	38,608	21.1
	1884	147,660	76,577	42,839	33,738	28,244	19.1
	1885	126,260	67,345	36,733	30,612	22,182	17.6
Scotch	1877	8,653	4,547	2,563	1,984	1,543	17.8
	1878	11,087	5,756	3,180	2,576	2,151	19.4
	1879	18,703	9,865	4,724	5,141	4,114	22.0
	1880	22,056	11,047	6,051	4,996	4,958	22.5
	1881	26,826	13,814	7,038	6,776	5,974	22.3
	1882	32,242	16,316	8,614	7,702	7,312	22.7
	1883	31,139	14,596	8,822	5,774	7,721	24.8
	1884	21,953	10,561	6,341	4,220	5,051	23.0
	1885	21,367	10,707	6,148	4,599	4,512	21.1
Irish	1877	22,831	10,313	9,826	487	2,692	11.8
	1878	29,492	13,224	12,700	524	3,568	12.1
	1879	41,296	18,929	17,046	1,883	5,321	12.9
	1880	93,641	42,316	39,368	2,948	11,957	12.8
	1881	76,200	34,627	31,698	2,929	9,875	13.0
	1882	84,132	38,757	34,126	4,631	11,249	13.4
	1883	105,743	43,636	43,020	616	19,087	18.1
	1884	72,566	30,640	30,819	*179	11,107	15.3
	1885	60,017	26,160	26,631	*462	7,217	12.0
Total of British origin	1877	95,195	49,090	31,157	17,933	14,948	15.7
	1878	112,902	58,852	36,601	22,251	17,449	15.5
	1879	164,274	87,801	48,432	39,369	28,041	17.1
	1880	227,542	112,513	76,437	36,076	38,592	17.0
	1881	243,002	122,668	76,160	46,508	44,174	18.2
	1882	279,366	139,243	88,158	51,085	51,965	18.6
	1883	320,118	150,994	103,708	47,286	65,416	20.4
	1884	242,179	117,778	79,999	37,779	44,402	18.3
	1885	207,644	104,221	69,512	34,709	33,911	16.3
Foreigners	1877	21,289	11,649	5,895	5,754	3,745	17.6
	1878	31,697	17,948	8,157	9,791	5,592	17.6
	1879	49,480	29,320	11,378	17,942	8,782	17.7
	1880	100,369	56,668	23,732	32,936	19,969	19.9
	1881	144,381	78,240	33,637	44,603	32,504	22.5
	1882	130,029	72,384	30,832	41,552	26,813	20.6
	1883	73,260	38,805	19,167	19,638	15,288	20.9
	1884	57,773	31,730	14,969	16,761	11,034	19.1
	1885	53,783	28,725	15,067	13,658	9,991	18.6

* Excess of females over males.

XVII.—*Statement showing the total number of British and foreign immigrants, from various countries, landed in the United Kingdom in each year since* 1870, *the first year in which the number was recorded.*

Year or period.	From United States.	From British North America.	From Australasia.	From all other places.	Total.
1870	46, 505		2, 652		49, 157
1871	47, 726	3, 997	1, 994	110	53, 827
1872	(*)	(*)	(*)	(*)	70, 181
1873	68, 536	5, 862	2, 574	9, 444	86, 416
1874	100, 527	7, 791	1, 892	7, 919	118, 129
1875	80, 045	6, 577	2, 108	5, 498	94, 228
Total 1871-'75	(*)	(*)	(*)	(*)	422, 781
1876	72, 592	7, 284	2, 761	10, 920	93, 557
1877	60, 825	5, 902	4, 702	10, 329	81, 848
1878	54, 989	6, 401	4, 403	12, 158	77, 951
1879	34, 043	3, 640	5, 291	10, 996	53, 978
1880	45, 488	5, 084	6, 290	11, 454	68, 316
Total 1876-'80	267, 937	28, 401	23, 450	55, 857	375, 645
1881	51, 197	6, 199	6, 308	13, 401	77, 105
1882	53, 415	6, 714	7, 318	15, 357	82, 804
1883	70, 560	7, 280	7, 155	15, 508	100, 503
1884	91, 016	9, 167	8, 694	14, 589	123, 406
1885	81, 450	10, 079	8, 272	13, 748	113, 549
Total 1881-'85	347, 638	39, 439	87, 747	72, 603	497, 427

* Cannot be given.

XVIII.—*Statement showing the number of British and Irish immigrants, from various countries, landed in the United Kingdom in each year since* 1876, *the first year in which the nationality of the immigrants was recorded.*

Year or period.	From United States.	From British North America.	From Australasia.	From all other places.	Total.
1876	54, 697	6, 629	2, 579	7, 499	71, 404
1877	44, 878	5, 687	4, 637	8, 688	63, 890
1878	34, 040	6, 204	4, 207	10, 493	54, 944
1879	20, 048	3, 497	4, 967	9, 424	37, 936
1880	26, 518	4, 688	5, 910	9, 891	47, 007
Total 1876-'80	180, 181	26, 705	22, 300	45, 905	275, 181
1881	29, 781	5, 761	5, 877	11, 288	52, 707
1882	28, 468	6, 097	6, 871	13, 275	54, 711
1883	46, 703	7, 021	6, 844	13, 236	73, 804
1884	61, 466	8, 861	8, 812	12, 717	91, 356
1885	57, 604	9, 821	7, 946	10, 597	85, 468
Total 1881-'85	224, 022	87, 061	85, 850	61, 118	358, 046

XIX.—*Statement showing, for each year since 1870, the countries from whence the immigrants came to the United Kingdom, distinguishing the nationality of the immigrants as far as possible.*

FROM UNITED STATES.

Nationalities.	Annual average, 1870–74 (five years).	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
British and Irish	(*)	(*)	54, 697	44, 878	34, 040	20, 048	26, 518	29, 781	28, 468	46, 703	61, 466	57, 604
Foreigners	(*)	(*)	17, 363	15, 91[illegible]	20, 949	13, 955	18, 970	21, 416	19, 493	23, 857	29, 550	23, 846
Not distinguished	(*)	(*)	532	325	......	......	......	......	5, 454	....	....	....
Total	(*)	80, 045	72, 592	60, 825	54, 989	34, 043	45, 488	51, 197	53, 415	70, 560	91, 016	81, 450

FROM BRITISH NORTH AMERICA.

Nationalities.	Annual average, 1870–74 (five years).	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
British and Irish	(*)	(*)	6, 629	5, 687	6, 240	3, 497	4, 688	5, 761	6, 097	7, 021	8, 861	9, 321
Foreigners	(*)	(*)	655	305	197	143	396	438	560	259	306	758
Not distinguished	(*)	(*)	......	......	......	......	......	......	57	....	....	....
Total	(*)	6, 577	7, 284	5, 992	6, 401	3, 640	5, 048	6, 199	6, 714	7, 280	9, 167	10, 079

FROM AUSTRALASIA.

Nationalities.	Annual average, 1870–74 (five years).	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
British and Irish	(*)	(*)	2, 579	4, 637	4, 207	4, 967	5, 910	5, 877	6, 871	6, 844	8, 312	7, 946
Foreigners	(*)	(*)	......	65	196	327	380	431	447	311	382	326
Not distinguished	(*)	(*)	182	......	......	......	......	......	......	....	....	....
Total	(*)	2, 108	2, 761	4, 701	4, 403	5, 294	6, 290	6, 308	7, 318	7, 155	8, 694	8, 272

FROM ALL OTHER PLACES.

Nationalities.	Annual average, 1870–74 (five years).	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
British and Irish	(*)	(*)	7, 499	8, 688	10, 493	9, 424	9, 891	11, 288	13, 275	13, 236	12, 717	10, 597
Foreigners	(*)	(*)	2, 225	1, 470	1, 665	1, 572	1, 563	2, 113	2, 082	2, 272	1, 769	2, 076
Not distinguished	(*)	(*)	1, 196	171	......	......	......	......	......	....	103	1, 075
Total	(*)	5, 498	10, 920	10, 329	12, 158	10, 996	11, 454	13, 401	15, 357	15, 508	14, 589	13, 748

FROM ALL PLACES.

Nationalities.	Annual average, 1870–74 (five years).	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
British and Irish	(*)	(*)	71, 404	63, 890	54, 944	37, 936	47, 007	52, 707	54, 711	73, 804	91, 356	85, 468
Foreigners	(*)	(*)	20, 243	17, 575	23, 007	16, 037	21, 303	24, 398	22, 582	26, 699	32, 007	27, 006
Not distinguished	(*)	(*)	1, 910	203	......	......	......	......	5, 511	....	103	1, 075
Grand total.....	75, 542	94, 228	93, 557	81, 848	77, 951	53, 973	68, 316	77, 105	82, 804	100, 503	123, 444	113, 549

* Cannot be given.

XX.—*Statement showing, for British and foreign immigrants, in each of the years 1877 to 1885, the number and sex of adult immigrants, the excess of males over females, and the number of children compared with total number of immigrants.*

Nationalities.	Years.	Total number of immigrants.	Adults.			Children and infants.	
			Males.	Females.	Excess of males over females.	Total number.	Proportion of children to total immigrants.
							Per cent.
British and Irish	1877	63,890	35,405	18,609	16,796	9,876	15.5
	1878	54,944	31,343	15,688	15,655	7,918	14.4
	1879	37,936	21,035	11,342	9,693	5,559	14.7
	1880	47,007	26,007	14,713	11,294	6,287	13.4
	1881	52,707	28,780	16,669	12,111	7,258	13.8
	1882	54,711	30,277	16,317	13,960	8,117	14.8
	1883	73,804	45,928	19,178	26,750	8,698	11.8
	1884	91,356	55,959	24,003	31,956	11,394	12.5
	1885	85,468	49,969	24,365	25,604	11,134	13.0
Foreigners	1877	17,755	11,186	4,679	6,507	1,890	10.6
	1878	23,007	14,373	6,644	7,729	1,990	8.6
	1879	16,037	9,076	5,331	3,745	1,630	10.2
	1880	21,309	11,475	7,487	3,988	2,347	11.0
	1881	24,398	13,037	8,273	4,764	3,088	12.7
	1882	22,582	11,992	7,395	4,597	3,195	14.1
	1883	26,690	18,049	6,511	11,538	2,130	8.0
	1884	32,007	21,228	8,008	13,220	2,771	8.7
	1885	27,006	17,483	7,134	10,349	2,389	8.8

XXI.—*Balance of emigration, deducting total recorded immigration from total recorded emigration.*

Years.	Emigration.	Immigration.	Net emigration.	Years.	Emigration.	Immigration.	Net emigration.
1870	256,940	49,157	207,783	1878	147,663	77,951	69,712
1871	252,435	53,827	198,608	1879	217,163	53,973	163,190
1872	295,213	70,181	225,032	1880	332,294	68,316	263,978
1873	310,612	86,416	224,196	1881	392,514	77,105	315,409
1874	241,014	118,129	122,885	1882	413,288	82,804	330,484
1875	173,809	94,228	79,581	1883	397,157	100,508	296,654
1876	138,222	93,557	44,665	1884	303,901	123,466	180,435
1877	119,971	81,848	38,123	1885	264,385	113,549	150,836

XXII.—*Balance of emigration of persons of British and Irish origin only, deducting recorded immigration from recorded emigration of such persons.*

Years.	Emigration.	Immigration.	Net emigration.	
			Numbers.	Proportion per cent. of total population of United Kingdom.
1876	109,469	71,404	38,065	0.11
1877	95,195	63,890	31,305	0.09
1878	112,902	54,944	57,958	0.17
1879	164,274	37,936	126,338	0.37
1880	227,542	47,007	180,535	0.52
1881	243,002	52,707	190,295	0.54
1882	279,366	54,711	224,655	0.64
1883	320,118	73,804	246,314	0.69
1884	242,179	91,356	150,823	0.42
1885	207,644	85,468	122,176	0.34

XXIII.—*Destinations of excess of emigrants over immigrants, among persons of British and Irish origin only, in the undermentioned years.*

Years.	Country of emigration and immigration.				
	United States.	British North America.	Australasia.	All other places.	Total.
1876	*143	2,706	29,617	5,885	38,065
1877	603	2,033	25,501	3,168	31,305
1878	20,654	4,448	32,272	584	57,958
1879	71,758	14,455	35,992	4,133	126,338
1880	140,052	16,214	18,274	5,995	180,535
1881	146,323	18,151	16,805	9,016	190,295
1882	153,435	34,344	30,418	6,458	224,655
1883	144,870	37,164	64,420	*140	246,314
1884	93,814	22,273	35,943	*1,207	150,823
1885	80,083	10,517	31,449	127	122,176

* Excess of immigrants.

I am indebted to Mr. Giffen for copies of each of his returns for the ten years from 1876 to 1885. Very able reports accompany these returns, the chief points of which may be thus grouped, epitomized, and commented upon:

THE LAW OF EMIGRATION.

North America its destination when trade is good.

In 1876, 143 more British and Irish returned to the United Kingdom from the United States than emigrated thither.

The emigration to Australasia, however—

Says Mr. Giffen in his report for that year—

has been of late comparatively steady, while that to the United States and North America fluctuates from year to year and period to period. The phenomenon may be not unconnected with the encouragement to immigration given by some of the Australian colonies, which operates in all years alike, whereas in years when natural causes promote a stream of emigration from European countries, the flow is to North America as the most easily accessible country.

In the report for 1879 the subject is continued:

The actual decline of immigration [says Mr. Giffen], at a time when emigration increases, appears important. It would seem to be a natural inference from this circumstance that there is always a certain amount of "tentative" emigration, and that of those who go away a larger number stay in the countries to which they depart in good times than in times when trade is depressed. Thus the diminution of immigration in a year like 1879 is a sign of the operation of causes which are likely to promote emigration for some time afterwards. By and by, as emigration increases, immigration will increase too, till at last, when the tide is again turning, immigration will be large in the face of declining emigration, and there will be a small excess of emigrants; but for the present, judging by past statistics, we seem to be at a comparatively early stage of a new tide of emigration. It will be seen [see Table XXI, page 407 of this report] that between 1870 and 1873 emigration and immigration both increased, but there was very little increase in the excess of emigrants; that in 1874 there was a large decrease of emigration coupled with a large increase of immigration, so that the excess of emigration showed a large diminution, the exact contrary of what is now occurring; and that from 1874 to 1877 there was a steady decline of both emigration and immigration, but more in the former than the latter, so that the excess of emigrants declined. It seems reasonable to infer that the present movement is likely to follow the same course, and will be followed by an increase of both emigration and immigration, accompanying a considerable net emigration, and thereby a decrease of both, accompanied by a very small net emigration. Of course I do not put forward any such opinion authoritatively, the sole object being to call attention to what seems the bearing of the figures when compared with those of former periods.

How accurately, however, even at that early day, Mr. Giffen discerned the rule, since more completely developed, will be seen by reference again to the table indicated above between brackets, viz, Table XXI, of this report.

> It has already been stated incidentally [continues Mr. Giffen] that the principal part of the increase of emigration, as was the case last year, is to the United States and British North America, in which, as I had often occasion to point out in former reports, the chief falling off in previous years occurred. The point seems deserving of fuller statement. The inference from the former falling off was that the natural stream of emigration was to North America, and the emigration to Australia was only steadier because it was not so completely self-supporting; and this inference is apparently supported by the direction of the stream of emigration when trade becomes good. Almost all the increase goes to North America and very little to Australia. Thus, taking all emigrants, including foreigners, we find that out of a total increase of 70,000 in 1879 compared with 1878, no less than 53,000 is an increase of emigration to the United States and 9,000 to British North America, leaving only 8,000 as the increase to all other places, including Australia. The increase to America, moreover, is about 65 per cent., whereas to Australia it is very little over 13 per cent. Dealing with the emigration of persons of British and Irish origin only, we find that while the total increase as above stated is 51,372 persons, the increase to the United States only is 37,112 persons and to British North America 7,300 persons, leaving only 7,000 as the increase to all other places, including Australia. Here, again, the increase to North America is 69 per cent., and to Australia only about 12 per cent.

In his report for 1884 Mr. Giffen notes the great decline in emigration for that year, which he had foreshadowed in his report for 1883 as likely to occur, and proceeds:

> The fact being thus evident that there is a general decline in emigration, which has practically been going on for two years and seems likely to continue during the present year, it may be interesting for a moment to consider how far the facts brought out in these tables correspond to what has been suggested from time to time as the reason for the rise and fall in emigration itself. What I have pointed out in former reports is that to all appearance emigration, as a rule, does not take place in times of the greatest dullness of trade, but rather in times of prosperity immediately succeeding a period of dullness, and that it begins to fall off again when depression returns. The reason may, perhaps, be that as the chief emigration takes place to the United States, and as the largest fluctuations are in the movements to and from the United States, then it is the state of trade there which determines the strength of the current of emigration from Europe at particular times. That state of trade, whether prosperous or the reverse, is likely enough to correspond with the state of trade in Europe itself. This being so, it would follow that emigration would take place from Europe when times are good, and not when times are dull. The reason, however, would be not that prosperity causes the emigration or dullness the decline of the emigration, but that it is the prosperity or dullness of trade in the United States, and in other countries to which emigrants proceed, which is the real operative cause. At any rate, the facts of the present time quite bear out this view. Trade has been depressed in the United States during the last two years, and is more depressed now than it was at the beginning of the period, and it is during these two years that the emigration from Europe has been declining, and that the immigration into Europe has been increasing; that immigration, it may be observed, being greatest from the United States. It is also plain that emigrants, consisting principally of laborers, are hardly likely to proceed to new countries in the years when there is no demand for them, and when, on the contrary, there is a great abundance of labor in these new countries. To some extent, also, I should say the figures as to emigration are affected by the occurrence of years of prosperity in this way, that in the earlier years of prosperity a considerable lending of capital from old to new countries goes on, and this lending of capital promotes emigration from the old countries to the new, helping to give greater employment for labor in the new countries than there would otherwise be. In this way an appearance of probability is given to the assumption that prosperity is the cause of emigration. There is no doubt, however, that prosperity in the way described is only a contributory cause. The main cause is the great demand for labor in new countries when times are good there, from whatever cause, and it is only a coincidence that times are good in these countries when they happen to be good in the old countries themselves.
>
> It would be reasonable to anticipate that the moment prosperity returns to the United States the tide of emigration to that country will again begin to flow.
>
> One of the best proofs of the volume of emigration being related to the state of affairs of the United States is to be found in the figures as to immigration, when an

account is taken of the countries from which the immigrants came. Such an account is presented in the following table:

XXIV.—*Number of immigrants of British and Irish origin that landed in the United Kingdom from foreign countries in each of the years* 1877 *to* 1884.

Countries.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
United States	44,878	34,040	20,048	26,518	29,781	28,468	46,703	61,466
British North America	5,687	6,204	3,497	4,688	5,761	6,097	7,021	8,861
Australasia	4,637	4,207	4,967	5,910	5,877	6,871	6,844	8,312
Other places	8,688	10,493	9,424	9,891	11,288	13,275	13,236	12,717
Total	63,890	54,944	37,936	47,007	52,707	54,711	73,804	91,356

From this table it will be seen—and it may usefully be compared with the tables of emigration—that the chief fluctuating element as regards immigration is in the numbers coming from the United States.

In 1877 these numbers were 44,000, falling to 20,000 in 1879; since that date there has been a gradual increase until last year, the year of largest immigration of all, when the total was 61,000, or two-thirds of the whole immigration. No other destination shows changes at all corresponding, the difference in the immigration from all other places between 1879, the least year, and 1884, the highest year, being little more than 12,000. If it be true, then, that a large increase of immigration into this country means a decline in the emigration itself, and that the emigration in turn is determined by the want of employment in the country from which the immigrants return, then it must be evident that it is the state of affairs in the United States which is now diminishing the volume of emigration. Not only are the emigrants deterred from going to the United States by the state of the labor market there, but many people who have gone to that country are returning because they can find no employment at the present time.

The facts as to the immigration of persons of foreign origin are entirely in harmony with those in the above table. * * *

Reference has frequently been made in these reports to the peculiar character of the emigration to Australasia, which varies not quite in accordance with the emigration to the United States, and appears to be less exclusively determined by natural causes.

The emigration to Australasia last year was much smaller than it had been in 1883, but still a large figure; and but for the special emigration to Australasia neither would there have been the large increase of British emigration, which took place in 1883, from the United Kingdom, nor would the figure of emigration last year, small as it is by comparison, have been so large in reality.

The following table brings out this fact very clearly:

XXV.—*Destinations of excess of emigrants over immigrants among persons of British and Irish origin only in the undermentioned years.*

Country of emigration and immigration.	Excess of emigrants in—								
	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
United States	—*143	603	20,654	71,758	140,052	146,323	153,435	144,870	93,814
British North America	2,706	2,033	4,448	14,455	16,214	18,151	34,344	37,164	22,273
Australasia	29,617	25,501	32,272	35,992	18,274	16,805	30,418	64,420	35,943
All other parts	5,885	3,168	584	4,133	5,995	9,016	6,458	—*140	—*1,207
Total	38,065	31,305	57,958	126,338	180,535	190,295	224,655	246,314	150,823

* Excess of immigrants.

Commenting in his report for 1879 on so much of the above table as was then prepared, Mr. Giffen called attention to the remarkable increase which had taken place in the net emigration to the United States, from zero in 1876, to 20,654 in 1878, and to the increase of 240 per cent. from the latter number to the number for 1879. The increase in the case of Australasia, however, was but 30 per cent. from 1877 to 1878, and but 10 per cent. from 1878 to 1879. "In other words," says Mr. Giffen, "the natural stream of emigration to North America, which was almost wholly suspended in 1876 and 1877, and which began to flow a little in 1878, had once more swollen to dimensions greatly in excess of the comparatively steady emigration to Australia."

REGULARITY IN THE OPERATION OF THE LAW.

The regularity in the rise and fall of emigration and immigration which had begun to be observed in the report for 1879, as quoted above, continued so uninterruptedly that, in remarking upon the decline in immigration in 1855, Mr. Giffen, in his report for last year, again discusses the subject, as follows:

> The peculiarity [here] is that whereas in 1884 there was an increase of immigration, which reached its maximum in that year, there is now a decline. This decline was fully anticipated in last year's report, there being a certain regularity in the rise and fall of emigration and immigration which suggested the anticipation. According to former experience, it was stated, all the figures for 1885 ought to be smaller than they were in 1884. It is too soon to affirm a general and unfailing law in the matter, but the regularity of the movement, which has now been additionally confirmed by the experience of 1885, is in every way remarkable.
>
> The rule, as stated in last year's report, is to the effect that an increase of immigration accompanies generally an increase of emigration, and reaches its maximum in those years when the emigration begins to fall off from the maximum it has itself reached, and then in the succeeding years emigration and immigration both decline, the minimum, however, in the case of emigration preceding the minimum in the case of immigration, which, as a rule, occurs in the first year after the emigration, having declined, begins again to increase. Emigration had declined in 1884, and as that was the year of maximum immigration, the rule required that emigration and immigration should both fall off in 1885. This is what has happened. It now remains to be seen whether the increase of emigration will again precede the increase of immigration. According to former experience, we should first look for a decline or a stationary condition, as regards both emigration and immigration, for a year or two, with a low excess of emigrants over immigrants.

From the statistics of emigration for the first nine months of 1886, given further on in this report, it appears that the stationary condition here anticipated has not taken place, but there can be no question about the correctness of the prediction, in this same report of 1885, that "if there is a revival of emigration soon, this revival, according to all past experience, will be a sure indication of returning prosperity in the United States and other new countries."

THE IRISH.

The subject of Irish emigration and its peculiarities receives much attention in Mr. Giffen's reports. The points of chief interest dwelt upon may be thus stated:

The position of the English and Irish contingents in the emigration of persons of British origin is exactly reversed from what it was. Ireland in 1853–'55 contributed 61 per cent. of the emigrants, England contributing only 30 per cent.; but now England contributes 61 per cent. as compared with the Irish proportion of 29. In 1876–'77 the proportions had risen for England to 67 and had fallen for Ireland to only 24, and it was then conjectured that the reverse of positions alluded to was due to the larger proportion which those who were not really emigrants bore to the total emigration in years of low emigration as compared with the years when the total emigration was great. But, whatever the cause, the decline of the Irish and the increase of the English contingents has not varied very greatly from the extremes reached in the years referred to, as will appear more fully by reference to Mr. Giffen's Table No. XV, on page 178 of this report. It should be remembered, however, that the Irish figures, in proportion to the population of Ireland itself, remain very large. Ireland has less than a seventh of the population of the United Kingdom, but the Irish emigration is nearly a third of the total, and the lowest proportion it has reached was about a fourth in the years 1876–'79.

In his report for 1884 Mr. Giffen remarked upon a certain degree of change in the extent of the preference of the Irish for America, as follows:

> It would appear that the change in the character of the emigration from the United Kingdom is accompanied, to some extent, by a change in the destination of the emigrants. In the years from 1861 to 1870 the annual average emigration of persons of British origin was about 157,000, of which 81,000 were Irish, and of these Irish emigrants the number proceeding to the United States was 69,000, while the number of English and Scotch proceeding to the same destination was 44,000. In 1883, however, the latest maximum year, the total emigration was 320,000, and of this only 105,000, or less than one-third, were Irish, so that although 83,000 of this number of 105,000 proceeded to the United States, the proportion proceeding to that destination was altogether not so large as it had been in the years when the Irish element preponderated. The proportion of English emigrants now proceeding to the United States appears to be not four-fifths, as is the case with the Irish element, but only about one-half, and it is the same with the Scotch emigration. In 1884 the proportion of English and Scotch emigrants proceeding to the United States was somewhat larger, but still nothing like the proportion in which the Irish emigration has that country for its destination.

In his report for 1882, however, Mr. Giffen devoted more than usual attention to the subject of Irish emigration, and what he had to say then will be found of great interest:

> While the number of Irish persons emigrating, which showed a decline of about 17,000 in 1881 from the large total of 93,000 in 1880, increased last year to 84,000 [said Mr. Giffen], yet the proportion of Irish to the total emigration from the United Kingdom is rather less than it was in 1881, being nearly 30 as compared with 31 per cent.; it appears, in fact, that the increased emigration of persons of English origin amounts to 23,000, the total being 163,000, and the increased emigration of persons of Scotch origin is about 5,400, the total being 32,000, so that last year there were about 195,000 English and Scotch persons emigrating as compared with 84,000 Irish. The circumstances promoting emigration from the United Kingdom must thus be considered to have been very general, and not very specially connected with the condition of Ireland. The sudden increase of Irish emigration in 1880 remains an exceptional phenomenon, but the total which has been reached in 1882 may be considered as in correspondence with the general figures of the emigration from the United Kingdom.
>
> While the Irish emigration has thus come to be due to much the same causes as that of the rest of the United Kingdon, though it is somewhat larger in proportion to the population, it would appear from a new comparative table which has been prepared, that there are interesting differences between it and the English and Scotch emigration, in regard, first, to the proportion of the adult single female emigration to the total number of single adults emigrating; and, second, to the proportion of the number of children to the total emigrants. Both in the English and Scotch emigration the excess of males over females among the single adults emigrating is very large. Among the English emigrants in 1882 there were 63,992 adult single males, as compared with 22,519 adult single females, the excess being no less than 41,473, or nearly twice the number of adult single females emigrating. In the recent years of high emigration also, it will be seen, the proportions were much the same, the excess of adult single males over adult single females emigrating being about twice the number of the females. In 1879 the excess was nearly three times the number of females. The figures as to the Scoth emigration are also much the same, The adult single male emigrants in 1882 of Scotch origin were 13,451, the adult single female emigrants 4,857, and the excess of males over females 8,594. When we come, however, to the Irish emigration, we find that the adult single male emigrants in 1882 were 34,937, and the adult single female emigrants were 28,605, the excess of males over females being thus 6,332 only, or less than a fourth of the number of females; similarly, in 1881 and 1880, the number of adult single female emigrants was 26,644 and 33,269 respectively, the excess of males over females being in each case about 4,600 only. It is plain from these figures, therefore, that while of the number of single adults in the case of English and Scotch emigrants much the largest proportion are males, the proportions of the two sexes among the single adults are very nearly equal in the case of the Irish emigration. The inference would seem to be that there must be special causes attracting female

emigrants of Irish origin abroad, while the effect on the Irish population at home must undoubtedly be to prevent so large a proportionate excess of females over males as there is in the rest of the United Kingdom. As regards children, again, the facts are that while the proportion of children to total emigrants, in the case of the English emigration, is rather more than 20 per cent., and in the case of Scotch emigration is very nearly 23 per cent., it is about 13 per cent. only in the case of the Irish emigration. Of equal numbers of emigrants, therefore, it will be found that a larger proportion of Irish than of English and Scotch emigrants are adults either of marriageable age or approaching marriageable age. The result of these two differences, viz, the greater proportion of adult single females emigrating from Ireland, and the smaller proportion of children in the total emigration, cannot but be to make the Irish emigration proportionately far more effective in retarding the growth of population at home than is the English and Scotch emigration. The Irish emigration is much more largely than the English and Scotch emigration the emigration of people at the marriageable age or approaching the marriageable age.

The above facts appear to throw light on the population statistics of Ireland. According to the Report on the Census of Ireland for 1881, page 15 of Part II, it appears that there has been no change since 1871 in the proportion of the population between twenty and fifty to the total population, which may be partly accounted for by the fact that between 1870 and 1880 the emigration was comparatively small, and it was only at the close of the decade that it began to increase. But it is found on comparing the statistics of Irish population with those of England that the proportion of adults, at almost all ages between twenty and fifty in Ireland to the total population, is considerably less than in England. For the whole period of life between twenty and fifty, the proportion in Ireland to the total population is about 36 per cent., while in England it is nearly 40 per cent. This may partly account for the fact of a lower birth rate in Ireland than in England or Scotland, as well as for a smaller excess of births over deaths, the proportion of people in the prime of life being smaller in Ireland than it is either in England or Scotland. The excess of births over deaths has also of late years been very small in Ireland, and much less than it was about 1871 and 1872. In those years the excess was about 60,000, the figures in 1871 being 62,945, but since 1878 the excess has ranged between 25,000 and 35,000, viz:

1878	34,488
1879	30,239
1880	25,180
1881	35,755
1882	33,978

These facts appear to be all in accordance with those which appear on the face of the emigration returns themselves, and to which I have now called attention. The difference in the character of the emigration from Ireland as compared with English and Scotch emigration has a distinct effect upon the birth and death rates and the growth of population in that country.

The question is one which belongs more properly to the statistics of emigration from Ireland, as stated in the annual return of the Irish Government, including the emigration to other parts of the United Kingdom as well as to foreign countries; but assuming that the above figures, which are those of the Irish emigration from the United Kingdom, correspond very nearly to the emigration from Ireland, considered geographically, it is to be observed that during the last three years the amount of the emigration must have been such as to cause a real diminution in the population of Ireland. It is much larger than the excess of births over deaths in those years, as the following comparison shows:

XXVI.—*Comparison of Irish emigration from the United Kingdom, with the excess of births over deaths in Ireland.*

Year.	Excess of births over deaths.	Number of emigrants.	Diminution of population.
1880	25,180	93,641	68,461
1881	35,755	76,200	40,445
1882	33,978	84,132	50,154

This shows a diminution of about 160,000 in the population in three years. For several years before that the emigration was rather less than the annual excess of births over deaths, but during the last three years it may be considered that the population of Ireland has been steadily declining in consequence of the emigration.

CONCERNING THE OCCUPATIONS OF EMIGRANTS.

In Mr. Giffen's report for 1876 occurs the following observation upon the classification of the occupations of emigrants, as given in the table under that head for that year, which, I take it, equally applies to the tables of "occupations" in succeeding reports, including Table V, given on page 169 of this report:

> These figures as to occupations are necessarily somewhat loose, owing to the difficulty of getting the data properly registered in the first instance, and the numbers from whom no proper record of their occupation can be obtained. There seems no doubt, however, of the broad facts that the majority of adult male emigrants are laborers, and of single adult female emigrants domestic servants, though it would be difficult to insist on the minute correctness of the other classifications, or to draw any inferences from them.

BRITISH EMIGRANTS VIA THE CONTINENT.

Mr. Giffen calls attention, in his report for 1882, to the fact that his returns do not include a certain number of emigrants from the United Kingdom who take their passage to continental ports, and thence proceed, by shipping from those ports, to the United States. He had ascertained that during 1882 about 5,000 persons from the United Kingdom had gone to the United States by this route. The movement, however, has declined and shows no tendency to increase, being 2,969 in 1883, 1,806 in 1884, and 1,964 in 1885.

PROPORTION OF ADULTS INDICATING THE CHARACTER OF EMIGRATION.

In his last report for 1876 Mr. Giffen called attention to the fact that the proportion of adults, in the emigration to the United States for that year, was larger than the proportion of adults in the emigration to Australasia. This was regarded as evidence that the emigration to the latter country was more for permanent settlement than that to the United States. This was undoubtedly true at that period of abnormally low general emigration; but I find that in 1882, the year of maximum emigration, the difference had entirely disappeared, which seems to confirm, in a striking way, Mr. Giffen's theory as to the character of emigration to the United States in periods of small general emigration and large general emigration, respectively.

THE PASSENGER MOVEMENT.

The report for 1885 contains the following:

> Reference has already been made to the fact that, one year with another, the passenger movement generally between the United Kingdom and places out of Europe, apart from what is properly called emigration and immigration, is on the increase. This is shown by the following small table, continued from former reports, showing the numbers of cabin and steerage passengers, respectively:

XXVII—*Numbers of cabin and steerage passengers leaving the United Kingdom for places out of Europe in each of the years from* 1876 *to* 1885, *inclusive.*

Years.	Cabin passengers.	Steerage passengers.	Total.	Years.	Cabin passengers.	Steerage passengers.	Total.
1876	41,900	96,322	138,222	1881	54,270	338,244	392,514
1877	37,147	82,824	119,971	1882	56,739	356,549	413,288
1878	43,168	104,495	147,663	1883	55,840	341,317	397,157
1879	43,928	173,235	217,163	1884	57,403	246,498	303,901
1880	50,734	281,560	332,294	1885	51,428	212,957	264,385

The figures show, as Mr. Giffen says, that the passenger movement is on the increase—advancing from 41,900 in 1876 to 51,428 in 1885. The proportion which the number of cabin passengers bears to the whole movement for each year, however, is in the other direction—the percentage declining from 30 in 1876 to 20 in 1885, after having touched 14 in 1881-'83.

STATISTICS FOR THE FIRST NINE MONTHS OF 1886.

The emigration returns to the Board of Trade for the nine months ended September 30, which Mr. Giffen has just sent me, are summarized in the return for September, which is as follows:

XXVIII.—*Return of the numbers, nationalities, and destinations of the passengers that left the United Kingdom for places out of Europe during the month ended September* 30, 1886, *and the nine months ended September* 30, 1886, *compared with the corresponding periods of the previous years.*

MONTH ENDED SEPTEMBER 30.

Nationalities.	United States.		British North America.		Australasia.		All other Places.		Total.	
	1886.	1885.	1886.	1885.	1886.	1885.	1886.	1885.	1886.	1885.
English	11,490	9,610	2,374	1,519	3,724	3,352	1,433	1,009	19,021	15,490
Scotch	2,309	1,245	312	159	415	359	198	123	3,234	1,886
Irish	5,756	4,753	318	275	680	495	64	36	6,818	5,559
Total of British origin	19,555	15,608	3,004	1,953	4,819	4,206	1,695	1,168	29,073	22,935
Foreigners	11,390	4,157	461	121	70	92	267	308	12,188	4,678
Nationality not distinguished	....	....	.....	......	.....	.....	395	369	395	369
Total	30,945	19,765	3,465	2,074	4,889	4,298	2,357	1,845	41,656	27,982

NINE MONTHS ENDED SEPTEMBER, 30.

English	66,957	59,592	16,717	13,295	24,525	20,454	7,184	6,229	115,383	99,570
Scotch	13,762	10,585	2,613	2,197	3,102	3,572	803	682	20,280	17,036
Irish	45,976	44,591	2,532	2,417	3,920	4,784	268	270	52,696	52,062
Total of British origin	126,695	114,768	21,862	17,909	31,547	28,810	8,255	7,181	188,359	168,668
Foreigners	70,188	39,388	4,986	2,654	674	952	1,638	1,844	77,486	44,838
Nationality not distinguished	....	....	....	....	......	......	2,102	1,764	2,102	1,764
Total	196,883	154,156	26,848	20,563	32,221	29,762	11,995	10,789	267,947	215,270

NOTE.—The above figures being made up at the earliest possible date after the close of each month, are subject to correction in the annual returns.

R. GIFFEN

COMMERCIAL DEPARTMENT, BOARD OF TRADE, *October* 5, 1886.

It will be observed that the total number of emigrants of British origin to all places out of Europe, which was 168,688 for the nine months ended September 30, 1885, is 188,359 for the same period this year—an increase of 19,691, or 11.67 per cent. But while the colonies receive this year 61,664 against 53,900 in 1885, an increase of 7,764, or 14.40 per cent., the United States receive 126,695 against 114,768, an increase of 11,927, or but 10.39 per cent. Separating the colonies, however, British North America has 21,862 this year against 17,909 last year, an increase of 3,953, or 22 per cent., while Australasia has 31,547 against 28,810 last year, an increase of 2,737, or but 9.5 per cent. Combining the United States and British North America, the figures are 148,557 this year against 132,677 last, an increase of 15,880, or 12 per cent. Or, following the method observed in Mr. Giffen's annual tables, the statement would show the relation which the British emigration to each country bears to the total British emigration in Table XII, page 175 of this report, as follows:

XXVIII *a*.

Date.	United States.	British North America.	Australasia.	All other places.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*
1885	66	10	19	5
Nine months of 1886	67	12	17	4

Again, the increase in the total English movement over last year's is 15.88 per cent.; in the Scotch, 19.04 per cent.; and in the Irish, 1.22 per cent.; while the increase in the English movement to the United States is 12.36 per cent.; in the Scotch, 30.01 per cent.; and in the Irish, 3.10 per cent.

THE DISPERSED ABROAD.

As an appropriate supplement to the foregoing statistics, I subjoin a table, prepared by Mr. John O'Neill for the October number of The Nineteenth Century Magazine, which displays in one direction—the horizontal—the numbers of born natives of each country who are now living out of that country, and at the same time in the vertical columns the numbers of foreigners who reside in each such country. Only the born natives of the parent countries, says Mr. O'Neill, have been considered, descendants of such emigrants becoming absorbed among the natural population of their adopted countries. The compiler hopes in these statistics, admittedly imperfect but the best to be had, to lay the foundation for those more elaborate and complete statistics which may be won at some future time, when advancing civilization shall give us, along with other international arrangements, the benefit of regulations for periodical and contemporaneous censuses, accompanied by uniform records of emigration, immigration, and re-emigration.

XXIX.—*Numbers of born natives of each country now living out of that country, together with the number of resident foreigners, and the balance in favor of or against each country.*

Nationality.	Austria-Hungary.	Belgium.	Denmark, Norway, Sweden.	England (United Kingdom).	France.	Germany.	Holland.	Italy.	Russia (Finland only).
Austro-Hungarians	......	......	334	2, 913	12, 090	117, 997	......	16, 092	......
Belgians (Luxembourg)	346	......	......	2, 582	432, 265	12, 235	18, 816	583	......
Danes, Swedes, Norwegians	516	......	......	8, 151	2, 223	34, 946	......	609	306, 500
English	2, 272	3, 809	1, 478	......	37, 006	11, 139	1, 614	7, 302	5, 007
Colonials	......	......	......	145, 863	......	......	......	......	......
French	2, 695	52, 189	300	15, 725	......	17, 273	......	10, 781	......
Germans	98, 702	42, 608	37, 912	38, 228	81, 986	......	42, 026	5, 234	1, 800
Dutch	266	41, 430	131	5, 357	21, 232	17, 598	......	204	......
Italians	44, 724	219	33	7, 189	240, 733	7, 115	......	......	......
Russians and Poles	11, 904	......	7, 776	14, 666	10, 469	15, 097	......	1, 887	......
Spaniards and Portuguese	131	......	......	1, 858	74, 633	365	......	908	......
Swiss	6, 714	......	201	4, 311	66, 281	28, 241	......	12, 104	......
Other Europeans	12, 502	5, 243	328	1, 503	3, 601	1, 049	5, 320	1, 963	1, 000
Chinese	......	......	......	......	......	63	......	......	......
Other Asiatics	......	......	......	484	510	433	......	......	......
Africans	......	......	......	258	......	305	......	310	......
Americans (United States)	1, 418	......	236	18, 496	9, 816	9, 046	......	......	......
North Americans			637			879	......	1, 381	......
South Americans			......			2, 662	......	547	......
Australians, &c	......	......	......	......	......	288	......	......	......
Not specified	486	8	1, 602	26, 124	8, 225	......	1, 195	461	......
Total foreigners in each country	182, 676	145, 506	50, 968	293, 708	1, 001, 090	276, 731	68, 971	59, 956	314, 307
Living out of their own country	336, 713	496, 695	794, 623	4, 177, 739	482, 663	2, 601, 166	148, 255	1, 077, 216	......
Balance in favor	154, 037	351, 189	743, 655	3, 884, 031	......	2, 324, 435	79, 284	1, 017, 260	......
Balance against	......	......	......	......	518, 427	......	......	......	......

Nationality.	Spain.	Switzerland.	Other European countries.	Asia.	Africa	United States and Canada.	Mexico and Central and South America.	Australia and Polynesia.	Totals living out of their own countries.
Austro-Hungarians	271	13, 194	29, 867	......	8, 022	135, 550	383	......	336, 713
Belgians (Luxembourg)	360	500	......	......	637	28, 371	......	......	496, 695
Danes, Swedes, Norwegians	466	382	......	......	29	440, 262	539	......	794, 623
English	6, 569	2, 812	4, 189	93, 552	10, 043	3, 250, 404	62, 080	678, 463	4, 177, 739
Colonials	......	......	......	......	......	......	......	......	145, 863
French	17, 657	[1]58, 992	2, 542	......	15, 716	106, 971	181, 630	192	482, 663
Germans	952	89, 923	39, 828	......	1, 948	1, 966, 742	109, 974	43, 803	2, 601, 166
Dutch	82	438	......	......	221	58, 090	3. 206	......	148, 255
Italians	8. 825	41, 645	74, 693	7, 625	62, 203	176, 103	403, 232	2, 877	1, 077, 216
Russians and Poles	51	1, 285	104	......	533	[3]84, 279	......	......	147, 571
Spaniards and Portuguese	......	268	......	......	625	27, 688	337, 184	9, 377	453, 127
Swiss	454	......	......	......	412	88, 621	91	......	207, 430
Other Europeans	527	154	119, 173	82, 191	38, 579	......	[4]1, 985. 117	......	2, 258, 250
Chinese	334	......	......	[2]1, 351, 828	......	108, 924	......	[7]50, 593	1, 511, 742
Other Asiatics	8	......	8, 000	......	1, 153	......	[5]50, 032	......	60, 620
Africans	800	......	......	......	......	23, 598	44, 600	......	69, 871
Americans (United States)	......	......	......	......	......	......	931	......	
North Americans	1, 135	1, 111	......	6, 961	183	794, 967	[6]2, 670, 438	2, 066	3, 528, 670
South Americans	1, 194	......	......	......	......	4, 566			

[1] 5,339 Alsace-Lorrainers.
[2] Siam, Java, Madeira.
[3] 48,557 Poles.
[4] Mexico only.
[5] Peru.
[6] 2,625,728 in Peru alone.
[7] Hawaii and English colonies.

XXIX.—*Number of born natives of each country, &c.*—Continued.

Nationality.	Spain.	Switzerland.	Other European countries.	Asia.	Africa.	United States and Canada.	Mexico and Central and South America.	Australia and Polynesia.	Totals living out of their own countries.
Australians, &c	1	......	......	....	......	4,906	....	......	5,195
Not specified	2,017	331	4,861	6,187	79	....	183,668	2,150	237,394
Total foreigners in each country.	41,703	211,035	282,757	1,548,344	140,383	7,300,942	6,033,105	789,521	18,740,808
Living out of their own country....	453,127	207,430	......	....	......	....	....	......	....
Balance in favor.	411,424	......	......	....	......	....	....	......	....
Balance against..	......	3,605	......	....	......	....	....	......	....

The compiler makes the following comments on the above table, so far as it relates to America:

The born foreigners who are now in the American continents, north and south, amount to more than 13,000,000 out of our gross totals of nearly 19,000,000. United States immigration, which first sprang into great activity in the decade 1841–'50, reached its highest point, 730,000—2,000 a day—in 1882. In 1884 it had sunk temporarily, no doubt, to 461,000. At the same time it will be seen that these immigrant hosts have by no means permanently settled down, for 3,529,000 Americans now live outside their proper countries. It is to be regretted that the inconsistent modes of framing its statistics adopted by different countries preclude a complete analysis of the figures, which there was no choice but to amalgamate for the United States, Mexico, the rest of North America, and South America.

The emigration from Canada to the States is noteworthy, 1,000,000 having crossed the frontier before 1884 and 48,000 more in that year. Forty-four per cent. of the Canadian immigrants of 1881–'82–'83 passed on to the States. There are, per contra, 78,000 natives of the States in the Dominion. It is a significant fact that Mexico now holds nearly 2,000,000 of born Europeans, or 38 per cent. of her population.

As regards South America, Brazil showed an immigration, at Rio de Janeiro, in four recent years, of 93,000 Europeans, chiefly Portuguese, Italians, and Germans. But this is far surpassed by the Argentine Republic, which received in the same years 278,000 immigrants, mainly from Italy, Spain, and France. The numbers for 1884 were 103,000, whereas Brazil had only 18,000 in that year. In Uruguay the immigration is about 2,000 a year.

With the foregoing general statistics before us, it is now possible more accurately and understandingly to consider the subject of emigration in its specific relation to this consular district. For the reason, however, mentioned at the outset of this report, it is not possible to give statistics for the district of Manchester which approach accuracy nearer than may be inferred from a comparison (1) of the population of this district with that of England and with that of the United Kingdom, and (2) of the motives for emigration existing in this district with like motives in the country at large, so far as I have been able to ascertain a difference in them.

MANCHESTER'S SHARE OF EMIGRATION.

The consular district of Manchester, as will appear from the map, embraces the greater part of Lancashire, a considerable part of Cheshire, and small portions of Derbyshire and Yorkshire. Practically it conforms to what the laws of trade constitute "the Manchester district." This is the great commercial city of Manchester itself, whose population, including its suburbs immediately contiguous, the last edition of the

Encyclopedia Britannica estimates at 800,000, and the remarkable group of industrial cities near by, which are represented in the Royal Exchange of Manchester and use Manchester as their market town. Chief of these are Oldham (111,000), Bolton (105,000), Blackburn (104,000), Preston (97,000), Rochdale (69,000), Stockport (60,000), Burnley (50,000,) and Bury (52,000).* The figures given are those of the census of 1881. They would be some 10 per cent. larger now. The population of the district I estimate at 3,300,000 at the present time. It contains, therefore, a little less than 12 per cent. (11.8) of the population of England, including Wales (now 28,000,000), and 9 per cent. of the population of the United Kingdom (now something less than 37,000,000).

Assuming the causes of emigration to exist in equal measure in this district and the country at large, and applying the percentages just given to such of Mr. Giffen's statistics as are convenient for the purpose, the following table and subjoined calculations result for this consular district:

XXX.—*Account in detail (on the basis of Mr. Giffen's figures for England) of the number and destination of passengers leaving the Manchester district in 1885, showing the number of adults and children of each sex and the conjugal conditions of the adults.*

Description of emigrant.	United States.	British North America.	Australia and New Zealand.	East Indies.	British West Indies.	Cape of Good Hope and Natal.	Central and South America.	All other places.	Total.
Adults:									
Married:									
Males	959	192	396	47	27	71	52	30	1,774
Females	1,322	217	481	47	24	56	31	22	2,200
Single:									
Males	3,710	772	1,309	77	42	114	97	50	6,171
Females	1,237	242	496	39	21	52	27	20	2,134
Total adults	7,228	1,423	2,682	210	114	293	207	122	12,279
Children from one to twelve years and infants:									
Males	776	160	340	18	10	27	17	7	1,355
Females	703	165	326	14	6	28	14	6	1,262
Total	8,707	1,748	3,348	242	130	348	238	135	14,896

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* Salford is omitted, because included in Manchester.

Again, combining the totals of British (and Irish) emigrants as found in Mr. Giffen's tables of "occupations" for each of the nine years from 1877 (the first year in which the nationalities and occupations were both distinguished) to 1885, I get the subjoined table, which exhibits in its last column—9 per cent. of one-ninth of the totals—the average number of each class proceeding annually from the Manchester district:

XXX*a.—Number of adults of each sex of British and Irish origin who left the United Kingdom for places out of Europe in each of the nine years beginning with* 1877, *and in all of said years, and of the average pro rata share of the Manchester district for each such year.*

Occupation.	1877.	1878.	1879.	1880.	1881.	1882.
Males.*						
Agricultural laborers, gardeners, carters, &c	4,078	6,097	4,099	3,921	2,673	5,138
Bakers, confectioners, &c	112	144	150	186	147	281
Blacksmiths and farriers	125	144	229	140	156	285
Boot and shoe makers	155	148	175	142	158	215
Braziers, tinsmiths, whitesmiths, &c	52	25	60	44	46	83
Brick and tile makers, potters, &c	10	35	78	57	52	61
Bricklayers, masons, plasterers, slaters, &c	536	829	1,185	1,195	1,117	1,969
Builders	37	46	117	83	63	119
Butchers, poulterers, &c	161	179	305	267	147	193
Cabinet-makers and upholsterers	52	34	68	41	68	112
Carpenters and joiners	1,539	1,285	2,002	1,909	1,792	1,822
Clerks and agents	1,358	1,495	1,941	1,810	1,470	1,676
Clock and watch makers, and jewelers	25	41	48	33	54	43
Coach makers and trimmers	27	35	87	14	17	47
Coopers	85	25	52	62	44	28
Domestic servants	171	152	185	200	206	236
Engine drivers, stokers, &c	190	100	145	69	92	179
Engineers	481	640	763	632	564	560
Farmers and graziers	2,477	3,296	5,382	7,212	4,174	4,866
Gentlemen, professional men, merchants, &c	8,638	10,511	10,785	11,762	11,648	13,401
Laborers, general	9,816	13,701	28,504	50,064	59,823	69,732
Locksmiths, gunsmiths, &c	15	7	14	4	10	8
Mechanics	3,862	3,532	7,515	6,639	6,320	5,726
Millers, maltsters, &c	34	42	59	45	41	77
Miners and quarrymen	1,428	1,176	3,933	2,802	3,873	3,078
Painters, paper-hangers, plumbers, and glaziers	252	127	309	269	264	543
Printers	60	66	93	110	89	100
Saddlers and harness-makers	22	26	59	24	44	55
Sawyers	36	25	27	8	32	37
Seamen	161	172	229	199	190	123
Shipwrights	16	18	87	84	147	15
Shopkeepers, shopmen, warehousemen, &c	433	643	1,298	1,245	1,312	1,075
Smiths, general	165	147	168	263	233	258
Spinners and weavers	30	82	300	514	501	350
Tailors	213	207	289	303	277	259
Tanners and curriers	20	18	26	23	15	41
Turners	18	15	58	27	23	39
Wheelwrights and millwrights	36	59	62	20	52	71
Army and navy:						
Officers	568	702	511	621	554	559
Men	312	87	79	77	75	61
Other trades and professions	1,657	1,844	3,032	3,650	3,609	2,994
Occupation not stated	9,767	10,995	13,353	15,793	20,496	22,728
Females.*						
Domestic and farm servants, nurses, &c	6,917	8,771	10,152	18,757	18,512	21,460
Gentlewomen and governesses	381	93	87	96	143	148
Milliners, dressmakers, needlewomen, &c	205	208	348	277	235	459
Shopwomen	13	11	9	14	7	9
Other trades and professions	110	155	242	318	438	489
Occupation not stated	23,531	27,863	37,594	56,975	56,825	65,593
Total	80,247	95,453	136,233	188,950	198,828	227,401

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*By the "passengers acts" all persons twelve years of age and upwards are held to be adults.

XXX*a*.—*Number of adults of each sex of British and Irish origin who left the United Kingdom for places out of Europe, &c.*—Continued.

Occupation.	1883.	1884.	1885.	Total nine years.	Manchester's average per annum.
*Males.**					
Agricultural laborers, gardeners, carters, &c	8,094	9,212	9,087	52,399	524
Bakers, confectioners, &c	399	281	430	2,170	22
Blacksmiths and farriers	426	279	250	1,984	20
Boot and shoe makers	401	261	279	1,934	19
Braziers, tinsmiths, whitesmiths, &c	218	105	68	696	7
Brick and tile makers, potters, &c	136	62	45	536	6
Bricklayers, masons, plasterers, slaters, &c	2,356	1,189	1,098	11,474	115
Builders	90	96	119	770	8
Butchers, poulterers, &c	365	231	198	2,046	21
Cabinet-makers and upholsterers	215	114	110	814	8
Carpenters and joiners	3,388	1,720	1,874	16,831	168
Clerks and agents	2,359	2,207	2,849	17,165	172
Clock and watch makers, and jewelers	78	111	91	519	5
Coach makers and trimmers	70	57	39	343	3
Coopers	188	69	20	523	5
Domestic servants	231	336	495	2,212	22
Engine drivers, stokers, &c	296	190	142	1,403	14
Engineers	790	705	674	57,09	57
Farmers and graziers	6,258	5,126	5,223	44,014	440
Gentlemen, professional men, merchants, &c	13,740	12,923	9,441	102,849	1,029
Laborers, general	70,834	48,114	32,807	383,395	3,834
Locksmiths, gunsmiths, &c	15	16	....	89	1
Mechanics	5,009	4,787	4,478	47,873	479
Millers, maltsters, &c	84	71	82	535	5
Miners and quarrymen	4,519	3,688	3,825	27,822	278
Painters, paper-hangers, plumbers, and glaziers	1,351	877	602	4,494	45
Printers	201	186	139	1,044	10
Saddlers and harness-makers	99	56	44	439	4
Sawyers	86	36	34	311	3
Seamen	197	244	330	1,845	18
Shipwrights	34	46	28	375	4
Shopkeepers, shopmen, warehousemen, &c	1,347	1,308	1,265	9,926	99
Smiths, general	303	182	132	1,851	19
Spinners and weavers	386	343	231	2,707	27
Tailors	503	324	318	2,698	27
Tanners and curriers	62	31	28	264	3
Turners	77	35	33	335	3
Wheelwrights and millwrights	120	82	50	552	6
Army and navy:					
Officers	407	296	327	4,545	46
Men	71	36	47	845	8
Other trades and professions	3,486	1,948	1,415	23,635	236
Occupation not stated	21,765	19,828	26,479	161,204	1,612
*Females.**					
Domestic and farm servants, nurses, &c	29,574	19,532	19,593	153,368	1,533
Gentlewomen and governesses	100	102	145	1,295	13
Milliners, dressmakers, needlewomen, &c	777	500	537	3,540	35
Shopwomen	25	30	45	163	2
Spinners and weavers	....	42	92	134	1
Other trades and professions	666	386	265	3,069	31
Occupation not stated	72,566	59,407	48,835	448,689	4,487
Total	254,702	197,777	173,783	1,553,324	15,533

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* By the "passengers acts" all persons twelve years of age and upwards are held to be adults.

So, also, it would appear (using Mr. Giffen's Table XV) that in thirty-three years, from 1853 to 1885, the Manchester district has sent abroad 527,016 emigrants, old and young. But from this number must be deducted the number of those who have returned. This can only be estimated, as there are no records of immigration before 1870, and none of British and Irish before 1876. A more accurate estimate, however, than might be expected can probably be made, for, using the figures in Mr. Giffen's Tables XXI and XXII, and comparing different periods, I find that in the five years—1870-'75—30.85 per cent. of the total number of emigrants, including foreigners, returned to British ports, while only about 1 per cent. more, or 32.02 per cent., returned in the ten years, 1876-'85. But, during the same ten years, 31.63 per cent. of the

British emigrants returned, showing a somewhat greater proportion of "tentative" emigrants among the foreigners. While, therefore, as Mr. Giffen says, immigration has been increasing of late years, the rate of increase would, from these figures, appear to be very small, and 30 per cent. would doubtless be a fair estimate for the proportion of persons of British origin who have returned to their own land during the thirty-three years. Deducting this percentage from the number of emigrants as above, the net loss to the Manchester district would be but 368,911, or 11,000 per annum; a small number when compared with a population that has increased at an average rate of 40,000 per annum during the same period.

LOCAL PECULIARITIES.

When we come, however, to consider local peculiarities in connection with the motives for emigration, there are certain facts which would seem to qualify, in an important degree, the figures as given above for this district. For example, the Census of 1881 (page 43, Vol. IV) shows that there were, in round numbers, 500,000 persons in the Manchester district engaged in the cotton industry, or 17 per cent. of the total population of the district at that time, being just half of the number, 34 per cent. (Census, Vol. IV, page 101), engaged in every kind of industry. Of the male adult emigrants who were sufficiently identified with the cotton industry to be classified as such, viz, as "spinners and weavers," the table just given above shows that from 1877 to 1885 there were but 2,707. Assuming that all of these went from this district, and that all the weavers were cotton weavers—an assumption in excess of the truth, of course—we have an average of but 300 of such persons out of a total of 9,431 of all occupations, or 3 per cent., or, including the females, an average of but 315 out of a total of 15,533, or 2 per cent. While, therefore, as Mr. Giffen is quoted in an earlier part of this report to have said, it would be difficult to draw inferences based upon the minute correctness of the classifications of occupations, the difference between the 2 or 3 per cent. thus liberally obtained and the 17 per cent. above is so great that a wide margin is left after making all allowance for such of the 1,612 male and 4,487 female emigrants whose occupations are not stated as may have been of those classified by the census as connected with the cotton industry.

Again, the Lancashire people, who constitute the bulk of the population of the district, are not a migratory people, as is evident from the fact (Census, Vol. IV, page 101) that of every 1,000 natives of the county enumerated in England and Wales 904 were still resident in the county, whereas of the 44 "registration counties" in England and Wales none other had as many as 900, and but two had over 800 of such residents.

Further, Lancashire has a larger proportion of its population engaged in industrial occupations, and a smaller proportion in agricultural, than any other of the forty-four registration counties—the percentage of the former being 34 against 24 for the whole kingdom, and of the latter 1.8 against 5.3 for the whole Kingdom. In the forty-five registration districts, including London, it has, also, next to London, the highest percentage in the "commercial class," and, except Bedfordshire, the lowest percentage (53) in the "unoccupied class." And it is the industrial and commercial classes that the peculiar economic laws of England—which, by the way, had their origin here in Manchester—most favor.

Again, taking the attraction of London to provincial people as the chief cause of migration from the counties—15 per cent. of all the extra-metropolitan natives of the United Kingdom having settled in London—an approximately correct idea may be formed of the resistance which the advantages of life in this consular district would naturally offer to the inferior temptations of America and the colonies. The Census Report (Vol. IV, page 59–60) shows that Lancashire and Cheshire have contributed but 1 per cent. of their natives to London, which is a smaller percentage than that contributed by any other counties. After explaining that propinquity is the chief factor in determining this migration from the counties to London, the report proceeds to say that the small contributions of Lancashire, Cheshire, Yorkshire, Durham, Derbyshire, and Staffordshire resulted not merely from the fact that "those counties were far off, for there were counties quite as far off that made larger though still small contributions. An additional cause was that the counties mentioned had attractions of their own; they were centers of industry and retained a more than average proportion of their natives at home."

And, finally, the people of Lancashire have a greater pride in their county—without doubt resting upon more than a sentimental foundation—than the people of other sections of England, so far as my observation extends, and, other things being equal, would hesitate more before leaving it.

On the other hand, the Irish residents in Lancashire constitute 6 per cent., and in Cheshire 3½ per cent, of the populations of these counties respectively, while the percentage of the Irish residents for the whole of England and Wales is but a little over 2. And the Irish, as we have seen, emigrate in larger numbers in proportion to population than the British.

Such are the indications of theory, which, it will be observed, with exception of the last mentioned, all point in one direction.

Local information, so far as, by diligent inquiry, I have been able to command it, supports the theory.

For example, Miss Emily Faithful, who has charge of the Manchester branch, for the northern and midland counties, of the Colonial Emigration Society, writes in reply to my inquiries:

> I do not think the people of Lancashire emigrate in proportion [to those of the rest of the Kingdom], certainly not as far as the women are concerned.

Miss Faithfull's efforts, before coming to Manchester, had been chiefly directed towards the emigration of women, but the distinction she suggests is in harmony with the fact that while of the total number of adults emigrating from England and Wales 40 per cent. only are females, 60 per cent. of all the persons engaged in Lancashire's chief industry are females.

Mr. J. T. Jordan, who enjoys opportunities for extensive and accurate information, writes:

> As regards Lancashire, the emigration of cotton-factory operatives has been very small during the past two years, owing to their being well employed and earning good wages, the low cost of provisions and low rents for their cottages, provisions being very much lower than ten years ago, and rents fully 30 per cent. less. The iron trade having been in a depressed condition the last two or three years, there has been a comparatively large emigration of operatives in this department of trade, and many of this class travel very often backwards and forwards according to the state of trade in this department in the two countries. The same may be said of stone masons and builders. As regard paupers, you may put them down as an unappreciable quantity, as they cannot go from hence if they wished. Farm laborers are an increasing quantity every year lately as emigrants, and if the farming industry does not improve soon, of which there is no immediate prospect, the exodus will increase considerably. Trades people, capitalists, and gentlemen may be put down as almost *nil*, or rather to an extent not appreciable. As regards the silk manufacturing industry of Macclesfield, about 14 miles from here, concerning which you inquire, the operatives are constantly emigrating to Paterson, N. J., owing to the continued depressed trade in that district. Of cotton operatives, calico printers, dyers, and bleachers, the largest number of those who go make their way to Lowell, Lawrence, and Fall River, Mass.;

Philadelphia, Pa., and Cohoes, near Troy, N. Y. There has been no emigration so far to the cotton-mills in South Carolina and Georgia, although I expect in the future an exodus to some small extent in that direction. There is a sufficient quantity of labor to be found at present among the poor whites in those two States; yet it only requires a beginning to start the outflow in that direction, the operatives here being of a gregarious nature and only requiring a bell-wether to lead the way.

To measure the bearing of the foregoing statements upon the point under consideration, it will be necessary to keep in view the proportion of the population of this district engaged in the several pursuits enumerated. As nearly all of the population of the district is comprised within the Lancashire part of it, and the Lancashire part of the district is that part of Lancashire which is most densely populated and which otherwise, except, possibly, as to the commercial class, chiefly determines the peculiarities of Lancashire, the figures for the whole of Lancashire will be found to be as nearly accurate for the Manchester district as need be, the small Cheshire and Derbyshire rural contingents being thus more than offset. Taking, therefore, the figures for Lancashire, the "unoccupied" class (largely composed of women having no definite "occupation", and of children under five years of age) is smaller in Lancashire, as has already been stated, than in any other county with the single exception of the small county of Bedford, being 53 per cent. of the total population. Of the remaining 47 per cent., 5 per cent. are enumerated in the "commercial" class, 4.7 per cent in the "domestic" class, 1.8 per cent in the "agricultural" class, 1.7 per cent in the "professional" class, and 34 per cent. in the industrial class.

Of all this industrial army, between a third and a half (quite half in the Manchester consular district) are engaged in the cotton industry; while the iron and steel trade claims but one-twentieth part of it (Census, Vol. III, p. 356); and, giving the silk industry the benefit of the addition of the whole number engaged therein in its stronghold, Cheshire, its quota is little over one-fiftieth part. It will be seen, therefore, that a comparatively large emigration from the last named two classes would exert but a small influence upon the general result. To take an extreme illustration: There were connected with the silk industry in Lancashire, Cheshire, and Derbyshire in 1881, 10,000 persons less than in 1871. If the whole of this loss, or 1,000 per annum, occurred from emigration (which of course is not the fact), it would make little difference one way or another with the total emigration of 20,000 adults per annum from those counties, or with the 15,000 per annum from the Manchester district.

[It may be observed with respect to the above calculations that the census figures for the four counties which contribute to make the area of this consular district could not be combined to any useful purpose, so widely do those counties differ in many characteristics and in the extent of their respective contributions to the total population of the district. The figures for Lancashire very fairly represent the district; for the district contains over three-fourths of the population of Lancashire, and seven-eighths of the population of the district are in Lancashire. The general effect of the figures, however, would be heightened were the same statistics accessible for the district. For example, there would be found more of the industrial element here than in the Liverpool end of the county, and less of the Irish—the census showing that Liverpool contains 1,262 out of every 10,000 Irish persons enumerated in England and Wales, and Manchester (including Salford) but 686. I have used the figures for Lancashire, therefore, on the principle of *a fortiori*.]

Finally, from a mass of letters and information in response to my letters of inquiry, given entirely without concert, of course, and yet all substantially to the same effect, I select a letter from Mr. Samuel Andrew, secretary to the Oldham Master Cotton Spinners' Association. Mr. Andrew gave evidence of very great importance before the royal commission on the depression of trade, and is probably the best authority in England on the subjects of which he writes as below:

> As to the condition of the people of the cotton spinning and manufacturing district of which Oldham is the center, it may be said that, generally speaking, during the last quarter of a century it has considerably improved up to the present year. The working classes have generally become better off on account of having regular work and receiving good wages. At present a dark cloud overhangs the cotton trade and this is causing some irregularity in the working of some of the cotton-mills, but the amount of actual distress from this cause is only small compared with the number of people engaged in the cotton trade. The cost of living in recent years has been very moderate compared with that of former periods in the history of the trade. Add to this fact that the savings of the working classes have generally been invested in undertakings which as a rule have returned good interest, say in loans to cotton and other companies and building and money clubs. The iron trade of the district, though not so brisk as in some former years, has for the most part found regular employment for those engaged in it. To show the industrial nature of the population which surrounds Oldham, it has been estimated that the earnings of the whole population are about *7s.* per week for every man, woman, and child, so that it may be said that every one gets his or her own living, and perhaps something to spare. The higher class of the population which lives on independent means seems to get smaller every year, while the class which includes the working population, or what has been at one time the working population, seems to have taken the place for the most part of what was called the higher class of former days.
>
> In recent years there has not been much emigration among the working classes of Oldham. In former years, before the period I am now speaking of, there was considerable emigration, and the few emigrants who now leave Oldham for America do so, as a rule, to join members of the family who have succeeded well in America and have sent for their relatives left here behind. The reason alleged why working people do not emigrate is that, as a rule, a workingman can do better in England than in America, taking cost of living into account. The few who do emigrate, otherwise than as above described, are chiefly of the Irish element, many of whom are verging on pauperism and are neither well housed, well fed, nor as a rule well clad, and for the most part are unskilled laborers.

THE SMALL EMIGRATION FROM THE MANCHESTER DISTRICT.

I conclude, therefore, that emigration from this consular district is not so great in proportion to population as in the rest of England, and that the figures as given in my tables, constructed on the basis of Mr. Giffen's tables for the whole country, require reduction to a greater or less extent. The difference appears to be chiefly the result of the preponderating influence in this district of the cotton industry, in which, it would seem, the laborer manages to extract a larger share of the joint earnings of capital and labor than his fellow in America.

Inquiry into the cause of the difference which it would seem exists between the ratio of emigration from the cotton, iron, and silk trades respectively—a subject too long for discussion here—may well engage the attention of students of political economy. Briefly, however, it may be pointed out that the agreement between the facts as they have been discovered to exist here and certain general facts well known to exist on our side of the Atlantic is so obvious and complete that they seem to bear the relation to each other of cause and effect. For example, the cotton industry in America some time since reached the point of over-production—that is to say, we make more cotton goods than the people within our walls can consume. The strain of competition for possession of the neutral markets has begun, therefore, with England, which has long been manufacturing for the world.

The statistics and information here gathered indicate that in such competition the English laborer is, thus far, left free to enjoy, and in an increasing degree, the benefit of the cheapening of the cost of living, which is taking place, as well as the benefit of the increased power of production, and therefore of earning, which constant improvements in the machinery he uses bestow upon him. Were it not so, the increase in the pressure of population, strengthened yearly to an enormous degree, would drive him from home in numbers many times greater than at present. In the silk trade, on the other hand, American production has not yet caught up with American consumption, and emigration proceeds in greater proportion from Macclesfield to Paterson—the probability being that, except for the increasing pressure of population, the laborer would not emigrate at all, whatever the capitalist might do with himself and his idle looms.* So, in the iron trade, the correlated facts give even greater evidence of mutual sympathy, the fluctuations in that industry—overproduction in which in America is not yet a steady condition, owing to the vast and irregular demands of railway building—being in keeping with the passing back and forth of laborers in it, noted by Mr. Jordan. That is to say, ocean transit is now so cheap and easy that the laborer seeks work where he can find it briskest and has the world to choose from.

I have, in one sense, given undeserved prominence to the silk industry, considering that, in a broad view, it can hardly be said to have emerged from the condition of an exotic; for, while the cotton industry absorbs one-twelfth of the whole industrial population of England and Wales, the silk industry employs less than one-hundredth part of it. But nearly half of all those engaged in this industry in the Kingdom are in the Manchester district; and for this reason, and because of the contrast its condition offers to its huge fellow textile, I have given it a prominence not accorded to industries greater than it.

CLASSES WHICH SUPPLY EMIGRATION.

From what has been said, it is plain that in a district like this, in which the industrial element so largely predominates, and the agricultural forms such an inconsiderable portion of the population, it must be the industrial class which supplies the greater portion of whatever emigration takes place. So, also, Mr. Giffen's table of "occupations" of emigrants would indicate the same fact—to a less degree, however—for the whole Kingdom. But it will be seen that the term "industrial" should be taken in a restricted sense.

Under the head "concerning the occupations of emigrants," I have already quoted Mr. Giffen's observation that "the figures as to occupations are necessarily somewhat loose, owing to the difficulty of getting the data properly registered in the first instance, and the numbers from whom no proper record of their occupation can be obtained." "There seems no doubt, however," continues Mr. Giffen, "of the broad facts that the majority of adult male emigrants are laborers, and of single adult female emigrants domestic servants."

Following out this idea, I have sought to minimize the effect of the looseness referred to, and yet to secure a reasonably satisfactory determination of the ratio of emigration to population of each of the classes contributing to the sum total of emigration, on the broader lines suggested. A table in the census of England and Wales divides the population into male and female, and these each into six classes, designated as the "professional," "domestic," "commercial," "agricultural," "industrial," and "unoccupied." In Mr. Giffen's tables, on the contrary, the emigrants are classified under forty-nine different heads. These are all to be found in their appropriate places in the census, under one or other of the great classes mentioned; but, inasmuch as some of these subdivisions are aggregated in Mr. Giffen's tables—for example, "gentlemen, professional men, merchants, &c.," include members of two at least of the census classes—I have chosen for the males (1) the "industrial" and (2) the "agricultural" classes, in which there is no confusion of classification as between the two systems; (3) "all other occupied classes," in which I have aggregated the "professional," "domestic," and "commercial" classes of the census on the one hand, and all such of Mr. Giffen's "occupations" as the census subdivisions indicate should be included under one or other of these three classes, on the other hand; and (4) the "unoccupied" class of the census, with whom I compare Mr. Giffen's figures for those whose occupations were not stated to the emigration officers. For the females I have made a somewhat different classification, substituting the "domestic" class (in which, of the "occupied" classes, the females predominate) for the "agricultural" (of which the females form practically no part).

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*It is to be observed that the Macclesfield silk emigrant does not go to France or Germany, whose greater art and technical skill are the chief cause of his own displacement, but to America as the newer country.

A careful study of the census report on the "unoccupied" class, in connection with the figures given in Mr. Giffen's tables for those "emigrants whose occupations were not stated," will show how closely the figures for such emigrants conform to what might be expected from the census analysis of the class from whom they would appear to have been drawn. Says the Census Report (Vol. IV, page 49):

> The [unoccupied] class comprised 14,786,875 persons, or 57 per cent. of the entire population, the females in it being to the males in proportion of rather more than two to one.
>
> It included, in the first place, 8,930,851 children and young persons under fifteen years of age, most of whom were simply unoccupied in the sense that they were as yet preparing for the various businesses of later life. Secondly, it included 532,441 others who were fifteen but under twenty years of age, and of whom also a large proportion were preparing for active life. Thirdly, it included 676,393 persons who were sixty-five years of age or more, and of whom a large number had been engaged in business, but had retired. Excluding these three classes of persons there remained 4,641,190 who were twenty but not yet sixty-five years of age, that is to say, who were in the working prime of life, and yet were without special occupation. Of these, however, 4,458,908 were women, of whom by far the greater part were married and engaged in the management of domestic life, and who can only be called unoccupied when that term is used in the limited sense that it bears in the census returns. Many more of these women, though unmarried, were also engaged in domestic duties, or were assisting their fathers or other near relatives in the details of business.
>
> Of the 182,282 males in the working period of life (20-65) without specific occupation, a large number, doubtless, were busily engaged in avocations which were none the less serious or less important because not recognized in our classification. They were managing their estates and property, directing charitable institutions, prosecuting literary or scientific researches, or engaged in other of the multifarous channels by which unpaid energy finds vent. If these were deducted from the 182,282 unoccupied males, and a further deduction were also made for those who were incapacipated for work by physical defects, the remainder, constituting the really idle portion of the community, would probably prove to be but very small.

In close conformity with the above it will be seen, in the table given further on, that the male emigrants, whose occupations were not stated, formed but 0.27 per cent. of the male "unoccupied" class of the census, whereas the female emigrants whose occupations were not stated formed 0.44 per cent. of the female "unoccupied" class of the census, many of these female emigrants being doubtless the wives or adult daughters of male emigrants whose occupations were stated. Again, says the Census Report:

> In 1871 the class called the "indefinite and non-productive class" comprised not only persons without specified occupations, but also the considerable body of persons whose occupations were described in the schedule, in general or vague terms, such as general laborer, artisan, apprentice, &c., or in terms the meaning of which was unknown. These latter we have removed to the industrial class, and our unoccupied class comprises and is confined to all those persons who were returned by rank, property, &c., and not by occupation, including all children under five years of age.

This suggests an important restriction of the term "industrial," and I have accordingly subdivided the "industrial" class into "general laborers," and the "industrial class exclusive of general laborers."

And, finally, assuming that the Scotch and the Irish censuses would not strictly follow the same method of classification as the English census, I have added to the figures in the English census the percentage (35.7) by which the population of the United Kingdom exceeds that of England and Wales. This is rendered necessary by the fact that the nationality of the emigrant is not distinguished in Mr. Giffen's tables of "occupations." Doubtless the relative proportions of the six census classes differ somewhat in Scotland and Ireland from those of the same classes in England and Wales. But the natives of the several nationalities are intermingled to a considerable extent—1 per cent. of the population of England and Wales being Scotch, and 2 per cent. Irish born, while the English and Welsh born supply 2 per cent. of the population of Scotland, Ireland, and the islands in the British seas; and the population of England and Wales so predominate (74 per cent.) in the total for the United Kingdom that the divergence from the actual facts cannot be very great.

With this exception, and the trifling exception to be noted later in the report, the comparison shown in the following table is believed to be as accurate as the census and the emigration tables from which its figures are deducted:

XXXI.—*Distribution of the population of England and Wales, according to sex, in several classes as distinguished in the census of* 1881; *the distribution of the population of the United Kingdom in the same classes reckoned upon the basis of the classification for England and Wales, and the amount and rates of British and Irish adult emigration from each class as averaged for the past nine years.*

Sex and class.	Population of England and Wales in 1881, as distributed in several classes.	Population of United Kingdom in 1881, as distributed in the same classes on the basis of their distribution in England and Wales.	Average number per annum during the past nine years of British and Irish adults emigrating.	Ratio of adult emigration to population.
MALES.				*Per ct.*
Industrial class (including general laborers)	4,795,178	6,505,980	60,010	0.92
General laborers (included in industrial class*)	559,769	759,481	42,599	5.61
Industrial class exclusive of laborers*	4,235,409	5,746,499	17,411	0.30
Agricultural class	1,318,344	1,788,667	10,715	0.60
All other occupied classes	1,670,124	2,265,983	16,159	0.71
Unoccupied class, or those whose occupation was not stated on emigrating	4,856,256	6,588,849	17,911	0.27
Total	12,639,902	17,149,509	104,795	0.61
FEMALES.				
Domestic class	1,545,302	2,096,628	17,030	0.81
Industrial class	1,578,189	2,141,248	427	0.02
All other occupied classes	280,427	380,478	485	0.13
Unoccupied class, or those whose occupation was not stated on emigrating	9,930,619	13,473,621	49,854	0.44
Total	13,334,537	18,091,973	17,791	0.37
Grand total	25,974,439	35,241,482	172,591	0.49

* The figures in this line of course are not to be included in the addition for the totals, as they are included in the figures for the industrial class.

This table brings out very clearly the broad facts stated by Mr Giffen, viz, that the majority of adult male emigrants are laborers, and of [single] adult female emigrants domestic servants. It also shows that while the "industrial" class, including the general laborers, contributes, in proportion to its numbers, 50 per cent. more than the "agricultural" class, it contributes, excluding the general laborers, but half as many in proportion; and the general laborers not only constitute three times as many as either of the other classes of male emigrants, but they contribute of their home population the great proportion of 6 per cent. Again, if the number of children under twelve years of age who emigrate (about 20 per cent. of the number of adult emigrants) be added to the number of adults, making the total 207,000, it will be seen that the general laborers constitute 20 per cent. of the whole number of emigrants. In conformity with this fact, the census shows that had the laboring class, including agricultural laborers, increased in the ten years 1871–'81 in the same ratio as the general population, there would have been 239,000 more of them than were enumerated in 1881.

So, of the females, twice as many of the "domestic" class emigrate, in proportion, as of the "unoccupied" class, though the actual number of emigrants of the latter is three times as great as that of the former. As before suggested, however, many of the female emigrants, whose occupations were not stated, and whom I have compared with the "unoccupied" class of the census, are doubtless wives and daughters of male emigrants, and go to swell the number of domestic servants upon arriving at their destination.

For those who care for a more detailed explanation of the classifications in the foregoing table it may be added that I have grouped the subdivisions in Mr. Giffen's tables under the larger classes of the census as follows:

MALES.

Census classification.	Classification in emigration tables.
Industrial class........	Bakers, confectioners, &c.; blacksmiths and farriers; boot and shoe makers; braziers, tinsmiths, &c.; brick and tile makers, potters, &c; bricklayers, masons, &c,; builders; butchers, poulterers, &c.; cabinet-makers and upholsterers; carpenters and joiners; clock and watch makers and jewelers; coach makers and trimmers; coopers; engine drivers, stokers, &c.; general laborers; locksmiths, gunsmiths, &c.; mechanics; millers, maltsters, &c.; miners and quarrymen; painters, paper-hangers, plumbers, &c.; printers; saddlers and harness-makers; shipwrights; general smiths; spinners and weavers; tailors; tanners and curriers; turners; wheelwrights and millwrights; other trades and professions.
Agricultural...........	Agricultural laborers, gardeners, carters, &c.; farmers and graziers.
All other occupied classes	Clerks and agents; domestic servants; engineers; gentlemen, professional men, merchants, &c.; lawyers; seamen; shop-keepers, shopmen, warehousemen, &c.; army and navy.
Unoccupied class......	Those whose occupations are not stated.

FEMALES.

Domestic class.........	Domestic and farm servants, nurses, &c.
Industrial class........	Milliners, dress-makers, needlewomen, &c.; shopwemen; spinners and weavers.
All other occupied classes.	Gentlewomen and governesses; other trades and professions.
Unoccupied class......	Those whose occupations are not stated.

The grouping of the emigration subdivisions, as above, follows the census classification, with the undermentioned exceptions: In my grouping for males, the "other trades and professions" are included in the "industrial" class, whereas the "professions" belong to the "all other occupied classes." On the other hand, "gentlemen" are included in the "all other occupied classes," whereas some of these may belong to the "unoccupied" class; and "shopkeepers" are included in the same class, though, if they had been distinguished from "warehousemen" in the emigration tables, they would have been included, as the "general shopkeepers" of the census, in the "industrial" class.

So, of the females, "other trades and professions" are not separated in the emigration tables, and therefore the "other trades" do not go under the "industrial" head, as otherwise they would.

An examination of the relatively small figures for these mixed classifications, however, will show that the confusion in respect of them can have no appreciable effect upon the result.

CAUSES OF EMIGRATION.

Having ascertained with sufficient accuracy the classes of the population which supply the greatest number of emigrants, the solution of the question of the causes of emigration is comparatively easy. And in considering the latter it will be seen that much light in turn is thrown upon the condition of the particular portion of the several classes which supplies the emigration.

Of the four chief supposed causes of emigration—compulsory military service, onerous taxation, strikes, and surplus population—the first two in no wise affect emigration from the United Kingdom. There is practically no compulsory military service here of any kind, the statute which authorizes the selection of militiamen by ballot, in cases where the militia quota of a particular county or district is not voluntarily filled, being temporarily suspended, and the regular army being raised entirely by voluntary enlistments. So, also, in the matter of taxation, the people of this country enjoy unusual immunity. Comparative tables* for the different civilized nations, recently published, show that the ratio of national and local taxation to gross earnings is less than 9 per cent. in England, considered apart from Scotland and Ireland; 9 per cent. in Denmark; 10 per cent. in the United Kingdom, Holland, and Sweden and Norway; 11 per cent. in the United States, Russia, and Belgium; 12 per cent. in Germany and Austria; 15 per cent. in France; 18 per cent. in Portugal; 21 per cent. in Spain; and 25 per cent. in Italy. So that, if we consider England alone, taxation is here lighter in comparison with the earnings of the people than in any of the countries named; while in the United Kingdom, considered as a whole, it is next to the lightest.

Again, if we consider the incidence of taxation upon the class which supplies emigration in comparison with that upon the upper classes, it will be seen that the laws of this country very greatly favor the former. A table derived from the same source as the figures just given shows the incidence of taxation in England, Scotland, and Ireland, and in the United Kingdom, upon the rich, the middle class, and the working class, respectively, per capita, and in comparison with income. The numbers of each class, says the compiler, Mr. Mulhall, are determined according to the results of legacy returns for 1877 in the three kingdoms, though the other figures are for 1881.

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* By M. G. Mulhall, Fellow of the Statistical Society and of the Society of Arts, &c

XXXII.—*Incidence of taxation in the United Kingdom on the three classes of the population.*

Classes of population.	Numbers.	Taxes.	Income.	Ratio taxes.	
				Per head.	On income.
Incidence on the rich:					
England	966,000	£14,190,000	£286,000,000	$71 54	4.96
Scotland	121,000	1,816,000	30,000,000	73 01	6.05
Ireland	72,000	1,175,000	14,000,000	79 44	8.40
Total	1,159,000	17,181,000	330,000,000	72 06	5.16
Incidence on middle classes:					
England	7,654,000	25,324,000	381,000,000	15 09	6.70
Scotland	967,000	3,930,000	49,000,000	19 78	8.02
Ireland	860,000	3,405,000	34,000,000	19 25	10.02
Total	9,481,000	32,659,000	464,000,000	16 74	7.03
Incidence on working classes:					
England	17,490,000	21,802,000	374,000,000	5 03	5.81
Scotland	2,646,000	4,244,000	46,000,000	7 80	9.23
Ireland	4,228,000	3,995,000	36,000,000	4 56	11.10
Total	24,364,000	30,041,000	456,000,000	5 97	6.63

STRIKES.

Strikes affect emigration from this country to some extent, but my information leads me to believe to a degree hardly worth taking into account. In the first place, as Mr. Giffen has clearly shown, it is not bad times (if we take strikes as evidence of bad times) in England which swells the tide of emigration; it is good times on our side of the Atlantic. And, in the next place, as strikes, in this district at least, are merely business contentions between two kinds of capitalists, the individually big and the individually little, the effect of a prolonged strike is chiefly to shove down the upper classes of unskilled laborers, whose places are thereupon occupied by the lower classes of the laboring small capitalists, and the movement proceeds downwards until a certain portion of the lowest orders of the "general laborers" is driven from the field of labor and into the ranks of the paupers. The bulk of the strikers, on the contrary, are abundantly able to endure the consequences of their action, which after all is deliberate and generally not an altogether unfriendly passage at arms. To such an extent was this true of the great strike last year of the Oldham spinners, which lasted thirteen weeks, that a number of the strikers, as I am informed, took advantage of the holiday to make pleasure trips across the Atlantic to visit their less fortunate brethren in America. The statistics of emigration, it will be observed, are altogether in conformity with this statement of the case; while the statistics of pauperism for last year show an increase of paupers throughout England and Wales as the result of the depression of trade which provoked the strikes.

Again, as the benefits of good trade are disproportionately manifested in this citadel of trade, so it would be natural to expect greater distress here when trade is bad; and such, indeed, proved to be the fact, the returns showing a somewhat greater increase of pauperism in Lancashire and Cheshire than in the rest of the country. Whatever may be the fluctuations in the number of paupers from time to time, however, the burden of pauperism has steadily declined since 1850, being in

1880, in comparison with the national income, but 67 per cent. of what it was in 1850.

PRESSURE OF THE POPULATION.

The incidental pressure upon the laboring class, occasionally caused by strikes among those above them in the industrial scale, which I have just described, illustrates that irresistible pressure of increasing population which, after all, is both the cause of modern British emigration and determines its character. The only wonder is that the emigration is so small. For, other things being equal, the pressure of rapidly increasing population upon an area to which the sea sets immovable limits, would increase, not in arithmetical, but in geometrical, progression. A familiar illustration will make this plain. If there are one hundred vacant houses in the community and ninety-nine applicants for houses, the applicants command their own terms. But if the number of applicants be increased to one hundred and one, the increase of rental demanded is not as 101 to 99, but is abnormally greater. In such case, however, the building of two more houses relieves the pressure. In the case of the newly-born Briton, not an acre can be added to the land.

The decrease in the emigration from Ireland is also in conformity with the view just stated, and the readiness with which the movement from the United Kingdom has responded to the influence mentioned, in conformity with the varying degrees of pressure of population in its several parts, is—making due allowance for such disturbing causes as the continuing effects of the Irish famine and the late war in our country—remarkably exhibited in the following table:

XXXIII.—*Ratio to population of British emigration in the three past decennial periods, and the rate of increase of population in those periods.*

United Kingdom.	Emigrants.			Ratio of emigration to population.		
	1851-'60.	1861-'70.	1871-'80.	1851-'60.	1861-'70.	1871-'80.
				Per cent.	*Per cent.*	*Per cent.*
England	640,000	650,000	971,000	3.4	3.0	4.0
Scotland	183,000	158,000	166,000	6.1	4.9	4.7
Ireland	1,231,000	867,000	543,000	20.1	15.5	10.2
Total	2,054,000	1,675,000	1,679,000	7.3	5.5	4.8

United Kingdom.	Increase of population.			Inhabitants per square mile.			
	1851-'61.	1861-'71.	1871-'81.	1851.	1861.	1871.	1881.
	Per cent.	*Per cent.*	*Per cent.*				
England	11.9	13.2	14.4	307	344	390	446
Scotland	6.0	9.7	11.1	94	100	110	122
Ireland	*11.8	*6.7	*4.4	205	181	169	161
Total	5.6	8.8	10.8	227	240	261	289

* Decrease.

In the above table the figures under the first two heads are taken from Mr. Mulhall's tables. Those for the percentages of increase of population from the census; those for the number of inhabitants per square mile, for England, from the census; for Scotland and Ireland, the census giving none, from Mr. Mulhall; for the United Kingdom, the census and Mr. Mulhall giving none, they are calculations based upon Table 47 of the census, Vol. IV, page 112.

As will be seen, the ratio of emigration to population in the United Kingdom has steadily declined during the thirty years, notwithstanding the greatly increased pressure of the population, which was 227 to the square mile in 1851 and 289 in 1881. In the case of Ireland, the ratio of emigration to population fell off 50 per cent. in the thirty years. At the same time a reduction of only 25 per cent. in the apparent pressure of population took place—from 205 to the square mile, in 1851, to 161 in 1881. But this disparity is entirely in keeping with the theory of a disproportionate progression in the pressure, as already explained. When, however, the case of England is considered, whose area would seem long ago to have reached the limit of endurance, supporting a greater population to the square mile, twenty years ago, by 10 per cent. than any other of the nations of Christendom, except Belgium, supports to-day, and now containing nearly double that of Italy and more than double that of Germany and France, it is cause for astonishment that the rate at which it throws off its population has scarcely increased at all. The laws of the land for the United Kingdom, but especially for overcrowded England, must have been adjusted to the needs of the laboring man with consummate skill to produce such a result. The fact, however, is altogether in conformity with the large number of like import to which attention has been already drawn.

DECLINE IN THE ATTRACTIONS OF THE UNITED STATES TO THE LABORING MAN.

It is the unskilled laborer, as we have seen, whom this country chiefly sends to us, the better class to the United States, and an inferior class to those colonies which find need for tempting immigration with assisted passages, the unskilled laborer who, within the limit of ability to transport himself, is furthest removed from partaking of the benefits which the remarkable economic system of this country seems to confer upon industrial merit. Under the pressure of the overcrowded population it is the survival of the fittest in the struggle to stay at home, and yet not the unfittest leave. These also remain as paupers. Fortunately for the emigrant laborer, whatever be the effect upon those with whom he comes into competition, the laws of most of the lands to which he turns his face, unlike those of the province of Minas Geraes, in Brazil, which impose a heavy tax upon his tools of trade, welcome him free of duty. But so they do his superior in industrial skill who refuses to emigrate. That is to say, it is commonly supposed they do. Perhaps, after all, the spinners and weavers in America pay a duty without knowing it. Manifestly, either the profits of manufacturing in America are much less than here, which ought not to be, seeing it is the land of raw material, or something in the laws or other forces controlling the American laborer, keeps down his share of the profits to such an extent that his industrial brother in England, though offered free entry, refuses to take advantage of it. The fact is the more significant when it is recalled that of all the imported elements which enter into the cost of the manufacturer's product the human element is the only one admitted by us duty free. Yet it is only when the laborer's grade of skill consigns him to work upon the cruder materials and in the cruder ways that the workingman can ever afford to avail himself of the imitation, and we have seen how even he would refuse it were it not that the fecundity of his race somewhat outruns the fertility of its industrial resource.

It will be interesting in this connection to compare the statistics of immigration into the United States from the two nations which contribute two-thirds of all our immigration, viz, the United Kingdom and Germany, with the insignificant numbers contributed by another of the chief nations of Europe, viz, France. The subjoined figures, extracted from Table No. 22 of the report of the Chief of the Bureau of Statistics for the three months ending March 31, 1886, make the comparison very striking:

XXXIV.—*Summary of aliens and immigrants of British, German, and French origin, respectively, carried in the United States by decades from* 1821 *to* 1880.

Nationality.	1821-1830.	1831-1840.	1841-1850.	1851-1860.	1861-1870.	1871-1880.
United Kingdom	75,803	283,191	1,047,763	1,338,093	1,106,970	989,163
Germany	6,761	152,454	434,626	951,667	822,007	757,698
France	8,497	45,575	77,262	76,358	37,749	73,301

Using Mr. Mulhall's tables of populations, another table may be constructed which will show the ratio of the above figures to population, as averaged for three double decades from 1821 to 1880, as follows:

XXXV.

Nationality.	Average population, 1821-1840.	Ratio of 20 years' emigration to population.	Average population, 1841-1860.	Ratio of 20 years' emigration to population.	Average population, 1861-1880.	Ratio of 20 years' emigration to population.
United Kingdom	23,625,000	1.50	27,635,000	8.63	31,690,000	6.61
Germany	28,815,000	.56	33,500,000	4.14	40,835,000	3.87
France	32,241,000	.17	35,696,000	.43	37,360,000	.30

The percentages in the above table, given under the head of "ratio of twenty years' immigration to population," represent the proportion which the total emigration for twenty years bears to the average population during those years. The ratio of annual emigration will be found by dividing the percentages by 20. The figures are so small that this is not convenient. Besides, the result of such division would not affect the purpose of the table, which is to show the relative progress of emigration from the three countries named during three representative periods. The extent of these periods has been made long enough, it is thought, to minimize, if not entirely to obliterate, the effect of transient causes. A glance, however, at the figures by decades, as well as at the figures by years, as given in the table appended, would suggest that the indication shown in the table of double decades would become only the more pronounced the more minute the comparison of figures:

XXXVI.—*Immigrants arrived in the United States during each year ending June 30, from 1877 to 1885, inclusive, of British, German, and French origin, respectively.*

Year.	United Kingdom.	Germany.	France.
1877	38, 150	29, 298	6, 856
1878	38, 082	29, 313	4, 159
1879	49, 968	34, 602	4, 655
1880	144, 876	84, 638	4. 318
1881	153, 718	210, 485	5, 227
1882	179, 423	250, 630	6, 003
1883	158, 092	194, 786	4, 821
1884	129, 294	179, 676	3, 608
1885	109, 508	124, 443	3, 493
1886	112, 548	84, 403	3, 318
Total	1, 113, 659	1, 222, 274	46, 453
Average per annum	111, 366	122, 227	4, 645

It will be convenient, however, to confine the comparison to that which is made in the table of double decades.

There are three general conditions upon which emigration depends, under one or other of which heads all the specific causes of emigration must fall. These (of importance inversely to the order of mention) are: (*a*) Dissatisfaction of the emigrant with his own country. (*b*) Facility of means for relief from such dissatisfaction, chiefly the comfort, cheapness, and speed with which his destination can be reached, but, also, measurably, the attitude of the Government which he abandons, and that of the Government which he proposes to adopt. (*c*) The attractions of the country of destination.

Considered with reference to these conditions, the figures of the table show a very remarkable uniformity in the response which the emigrant makes to the prevailing condition of the period, whether he be British, German, or French. The uniformity, however, is not remarkable at all, but only natural, if it be borne in mind how universal is the application of the great laws which govern human action. The figures show that the Briton, the German, and the Frenchman instantly availed themselves of the remarkable increase of the facilities of ocean transit which began to be developed in the early part of the double decade 1841–1860, in which period they found at the same time increasing benefit from the attractions of America. The figures also show that the Briton expressed his appreciation of the suddenly developed advantages of this period by increasing his emigration nearly 500 per cent. over his emigration in the preceding period 1821–1840. The German by increasing his emigration over 600 per cent.; and even the Frenchman, whose emigration is so small as scarcely to be expected to sympathize with the general movement, by increasing his emigration 150 per cent.

Coming to the next period, 1861–1880, the first two conditions of emigration—viz: (*a*) Dissatisfaction with home, arising, in modern times, as has been abundantly demonstrated, chiefly from pressure of population; and (*b*) facility of transit—exist in this period with so much greater force than in the preceding period, that unless conditions (*c*) (attraction of the country of destination) be changed, it should be found that emigration from the United Kingdom and Germany, at least, had increased to an almost incredible degree.

(*a*) With respect to the pressure of population, the following table will show how intensely that has increased in England; how greatly in the United Kingdom and in Germany, and what contrast the increase in these three presents to the almost stationary condition of France:

XXXVII.—*Inhabitants per square mile.*

Countries.	1820.	1840.	1860.	1880.
England and Wales	203	270	340	440
United Kingdom	172	221	240	290
Germany	124	145	174	217
France	148	165	175	180

(*b*) With respect to the increase of facility of transit it is unnecessary to do more than allude to the vast changes that occurred during the period under consideration, 1861–1880; the greater speed and safety with which the ocean could be crossed as compared with the preceding period; the smaller outlay required, and the better fare in return, law-ordered comfort substituted for the ancient horrors of the steerage; the arrangements for reception on landing in keeping with the advancing civilization of the age.

(*c*) But since, notwithstanding the enormous increase in the motives of emigration as dependent upon pressure of population and facility of transit, the figures show that the ratio of emigration, instead of greatly increasing actually declined, it follows that a great and unfavorable change has occured in condition *c* (the attractions of the United States).

The figures further show that while the attractions of the United States had declined in the ways of both nations, the Briton was able to express his sense of the decline by decreasing the ratio of his emigration 23 per cent., whereas some counteracting force in Germany compelled the German to content himself with expressing his sense of the decline by decreasing his ratio of emigration only 6 per cent.

Why the United States should have become so much less attractive to the kind of people who emigrate, viz, the laboring classes, in the period from 1861 to 1880, as compared with the period from 1841 to 1860, is a subject which need not be entered upon here. Attention being called to the evident fact, the incentive to remove the cause will be greater to those who have the power to do so.

It may be observed that "pressure of population," as used in this connection, is not altogether a uniform standard by which to draw comparisons between different nations. For example, one nation may have greater natural capacity for supporting a dense population than another. But if a certain long-past period is taken as the starting point for each nation, and the population of each increases in the same proportion, then the increase or decrease of the dissatisfaction of the laboring classes will depend upon the capacity of the governing powers to offset with wholesome laws the burden of increased competition. Some qualifications of this may be made, however.

Thus, in the case of England, the same rate of increase would cause a much greater intensity of pressure (as more fully explained further on under the head of "health") than in Germany; for the density of population in England alone (446 in 1881 to the square mile) is almost at the limit of endurance, while Germany's (less than half that of England and 25 per cent. less than that of the United Kingdom) shows a wide margin still at its disposal. On the other hand, in comparing England alone, allowance would have to be made for the greatly increased percentage of the total emigration from the United Kingdom contributed by England. Again, the attitude of Government in Great Britain is most favorable to emigration, while the demands of great military establishments in Germany and France permit emigration in a grudging way which finds its extreme manifestation in Russia and Turkey, where no subject can emigrate without the Czar's or the Sultan's permission.

The general conclusion from the foregoing is plain: That the population of France increases so slowly (it has been stationary since 1860) that the law-makers of that country find no difficulty in meeting the small additional burden imposed upon French productive power; and that the wisdom of the German law-makers in endeavoring to meet a much greater burden is vastly inferior to that of the law-makers of Great Britain, who more successfully dispose of a very much greater burden still.

It may be added that the uniformity that characterizes the fluctuations of the emigration of different nations to the United States confirms Mr. Giffen's conclusion that emigration depends not so much upon the state of affairs at home as upon prosperity or the reverse in the country of destination.

SOCIAL CONDITION OF THE PEOPLE.

The social condition of the people of this district is, in its general features, that of the people of England. The district contains its share of the upper classes, titled and untitled, and of the middle and lower classes. But, as would be anticipated from what has gone before, the predominance of the industrial and commercial interests tends to produce a condition of society more like that of our Eastern States—other sections, particularly in the south of England, presenting many features in common with the Southern States as they were before the late war.

Here, of all England, is to be seen the supreme effect of those extraordinary devices of economic legislation which have so changed in late years the relation which the income from trades and professions bears to that derived from lands, tenements, and titles, public dividends and annuities, Government offices and pensions. And Manchester, which, in the same period, has come to rank among the first cities in wealth and population, is the very embodiment of those forces which maintain this little island, against such odds, easily at the head of the world's commerce. As if to commemorate the triumph of these principles, the people have built them a great town hall at an expense of over $5,000,000; and in this, perhaps the finest municipal building extant, the mayor of Manchester holds a sort of plutocratic court, more brilliant in some respects than that of some of the political capitals. Within the city are public buildings and private warehouses of huge proportions and great cost, and its wealth spreads out over the land for many miles around in the homes of its merchant princes.

LANDLORD AND TENANT.

The new Domesday Book, published in 1873, contains the following information, which does not appear in any later form:

> Lancashire in 1872–'73 was divided among 88,735 proprietors, possessing 1,011,769 acres with an annual valuation of £13,878,277. Of the owners, 76,177 or 87 per cent., possessed less than 1 acre, and the average (annual) value, including minerals, was £13 14*s.* 4*d.* [$66.74] per acre. Nineteen proprietors owned upwards of 5,000 acres, the largest proprietor being the Earl of Derby, who possessed 47,269 acres, with a rental of £156,735 [$762,750]. Among other large proprietors are the Duke of Bridgewater's trustees, the Duke of Devonshire, the Marquis de Castija, the Earl of Stamford and Warrington, the Earl of Wilton, the Earl of Sefton, Lord Lilford, and Lord Skelmersdale.

The annual valuation rose from the amount stated above to £18,623,910 in 1885, or about $90 per acre.

During the past quarter of a century the number of owners of land in Lancashire, and especially within this consular district, has very considerably increased. There is an extensively prevailing custom by which buyers of land purchase in fee-simple, but subject to the payment of a small rent (called a chief rent) to the original owner in perpetuity. This custom is peculiar to this part of England, the purchases in the south and other districts being affected by means of leases for long terms (usually 999 years), the fee-simple remaining in the original owner.

The purchaser under this latter system is to all intents and purposes the owner of the land, but his property is personalty and not realty, as is the case with the Lancashire purchaser. The importance of this distinction will be evident when it is remembered that the English law varies very considerably in relation to the two classes of property.

The purchase of small plots of land and the building of rows of workmen's cottages thereon has been a favorite form of investment with successful operatives and small capitalists. Large numbers of the dwellings of the working classes in the manufacturing towns are owned by their fellow-workmen or by small shop-keepers, working or retired; and the assistance afforded by land and building societies, large numbers of which have been formed, has contributed greatly to this result.

STATISTICS INDICATING THE SOCIAL CONDITION.

The figures of the census of 1881 indicate the urban character of this consular district, which then contained five towns of over 100,000 inhabitants; five of over 50,000, but less than 100,000; two of over 40,000; four of over 30,000; thirteen of over 20,000; and twenty of over 10,000. There were at the same time but twenty towns in all England containing over 100,000 inhabitants.

Taking the figures for Lancashire, which supplies nearly all the population of this district, and which will in its general features pretty accurately represent the district, I find that the average number of children attending school last year was 465,656, or 12 per cent. of the population at that time—the proportion for England and Wales being the same.

The number of paupers in Lancashire on January 1, 1886, was 77,287, or 2 per cent. of the population, the proportion for England and Wales being nearly 3 per cent.; the cost of their maintenance per head of the population was 52 cents, against 82 cents in England and Wales; and the proportion of such cost to the yearly ratable value of real estate was 2.08 per cent., against 3.8 per cent. in England and Wales in 1875, (the figures for the latter are not to be had for a later date.) The proportion of paupers would be smaller for this consular district, as distinguished from Lancashire. For example, Liverpool and Manchester show one pauper to 28 of the population, whereas in the large industrial town of Oldham it is but one to 63, and so on throughout the district.

Each acre in Lancashire supports nearly three persons—the density of population being four times as great as in England and Wales, and more than twice as great as in any other county outside of London itself.

The number of illegitimate children in Lancashire averaged during the ten years, 1874 to 1883 inclusive, 4.5 per cent. of the births. In 1884 (the last return to hand) the percentage was 4.6 in Lancashire and 4.7 in all England.

There are no returns of divorces in the different countries. The rate for England, which was 1 to every 1,000 marriages in 1870, rose to 2 to every

1,000 marriages in 1880. In England 116 divorced persons were married in 1880; and the rate of such marriages to the total number of marriages was as 6 to 10,000. A statement of the present divorce law of this country is transmitted herewith.

Of the 192 verdicts of murder returned by coroners' juries in 1884, 163 were for infanticide, against 87 in 1883; 45 per cent. of the number for 1884 were returned in the county of Middlesex, which contains two-thirds of London. There was no verdict of this character in 1884 in Liverpool, and but 3 in Manchester.

The following comparative tables will further illustrate the several subjects to which they relate:

XXXVIII.—*Number of persons in chief Lancashire industries engaged in such industries in 1881 in England and Wales and in Lancashire.*

Industries.	England and Wales.*		Lancashire.†	
	Persons engaged.	Per cent. of population.	Persons engaged.	Per cent. of population.
Cotton	530, 261	2	432, 146	12
General laborers	559, 769	2. 16	74, 050	2. 15
Coal and mining	407, 873	1. 6	64, 546	1. 9
Iron and steel trade	361, 343	1. 4	55, 728	1. 6
Makers of machines	160, 797	0. 6	35, 216	1

* Population, 1881, 25,974,439.

† Population, 1881, 3,485,819.

XXXIX.—*Houses and population of England and Wales and of Lancashire in* 1881.

Items.	England and Wales.	Lancashire.
Houses:		
Inhabited	4, 831, 519	655, 807
Uninhabited	386, 676	68, 929
Building	46, 414	5, 697
Population:		
Males	12, 639, 902	1, 669, 864
Females	13, 334, 537	1, 784, 577
Total	25, 974, 439	*3, 454, 441

* This is the population of the county proper, as distinguished from the "registration county." The population of the latter, as chiefly used in this report, is, as will be seen, 31,378 greater. But the census uses the population of "registration counties," for records of occupation, &c., while it uses the population of the counties proper for records of the character here tabulated.

XL.—*Average number of persons to a family, persons to an inhabited house, families to an inhabited house, persons to a square mile, inhabited houses to a square mile, and acres to an inhabited house in England and Wales and in Lancashire in* 1881.

Political divisons.	Area in statute acres.	Persons to a family (separate occupiers).	Persons to an inhabited house.	Families to an inhabited house.	Persons to a square mile.	Inhabited houses to a square mile.	Acres to an inhabited house.
England and Wales	37, 239, 351	4. 61	5. 38	1. 17	446	83	7. 7
Lancashire	1, 208, 154	4. 76	5. 27	1. 11	1, 830	347	1. 8

XLI.—*Distribution by sex and age of the population of England and Wales and of Lancashire in* 1881.

Ages.	Proportion, males to 100,000.		Proportion, females to 100,000.	
	England and Wales.	Lancashire.	England and Wales.	Lancashire.
Under 5 years	6,767	6,944	6,788	7,090
5 to 15 years	11,437	11,192	11,461	11,368
15 to 25 years	9,165	9,281	9,605	10,055
25 to 45 years	12,472	13,400	13,455	14,402
45 to 65 years	6,760	6,187	7,514	7,105
65 years and upwards	2,062	1,332	2,514	7,709
Total	48,663	48,336	51,337	51,664

XLII.—*Unmarried, married, and widowed in* 100,000 *of each sex, in England and Wales and Lancashire in* 1881.

Social condition.	Proportion males to 100,000.		Proportion females to 100,000.	
	England and Wales.	Lancashire.	England and Wales.	Lancashire.
Unmarried	61,932	62,041	59,226	59,255
Married	34,621	34,641	33,282	33,066
Widowed	3,440	3,318	7,492	7,679

XLIII.—*Births, deaths, and marriages,* 1884.*

Items.	England and Wales.	Lancashire.
Population, 1881	25,974,439	3,485,819
Births	906,584	129,815
Deaths	531,951	84,308
Marriages	204,205	29,859

* Registrar-general's report (1885) for 1884.

XLIV.—*Annual death rate per* 1,000 *living, at all ages, and at eleven groups of ages, in England and in Lancashire.**

Ages.	England.	Lancashire.
All ages	21.27	25.17
Under 5 years	63.12	82.22
5 to 10 years	6.43	8.47
10 to 15 years	3.70	4.34
15 to 20 years	5.33	6.06
20 to 25 years	7.04	7.86
25 to 35 years	8.93	10.44
35 to 45 years	12.62	15.64
45 to 55 years	17.72	23.57
55 to 65 years	31.49	42.62
65 to 75 years	64.85	83.65
75 years and upwards	161.59	176.88

* Registrar-general's report (1885) for 1884.

XLV.—*Persons returned as blind, deaf and dumb, and insane in* 1,000,000 *of the population of England and Wales, and of Lancashire.**

Physical and mental condition.	England and Wales.	Lancashire.
Blind:		
From birth	75	79
Others	804	654
Total	879	733
Deaf and dumb	512	460
Insane:		
Idiots	1, 260	1, 064
Lunatics	1, 993	1, 572
Total	3, 253	2, 636

* Census of 1881.

It may be observed that the census report points out the unmistakable general rule, so far as it can be judged from the returns, that agricultural districts produce a much larger proportion of idiots and imbeciles than industrial districts. The manner in which the returns are made, however, is referred to as rendering such returns of much less value than in the United States, where specialists were employed in making them.

XLVI.—*Public schools*, 1885.

Items.	England and Wales.	Lancashire.
Population, 1881	25, 974, 439	3, 485, 819
Number of schools	19, 063	1, 712
Number of children who can be accommodated	5, 061, 503	*630, 571
Average number in attendance	3, 406, 076	465, 656
Present at annual inspection	3, 992, 074	566, 628

* Number on the register.

The cost per pupil in England, in the board schools, is £2 6*s*. 2½*d*.= $11.22.

XLVII.—*Statistics of crime in* 1884.

Items.	England and Wales.	Lancashire.
Population, 1881	25, 974, 439	3, 485, 819
Committed for trial:		
Males	11, 952	2, 083
Females	2, 455	703
Total	14, 407	2, 786
Convicted	11, 184	2, 242
Acquitted	3, 220	540

XLVIII.—*Savings banks (not including postal savings banks)*, 1884.

Political division.	Population, 1881.*	No. of banks.	Total amount invested with the commissioner for the reduction of the public debt.†	Total amount owing to depositors.	Amount of deposit per capita.	No. of receipts from depositors in year ending November, 1884.	No. of payments to depositors for same year.	Average amount of receipts.	Average amount of payments.	Average rate of interest paid to depositors.
England and Wales	25, 974, 430	329	$171, 855, 726	$172, 498, 382	$6 64	1, 376, 264	839, 854	$21 52	$37 27	$13 25
Lancashire ...	3, 485, 819	21	32, 695, 316	32, 777, 483	9 40	439, 675	262, 581	19 16	29 40	13 33

* For purposes of comparison with the population in 1884, per capitâ, it may be noted that the rate of increase of population during the decennial period, 1871-'81, was 1.44 per cent. per annum for England and Wales, and 2.2 per cent. per annum for Lancashire.

† This represents the capital of the banks.

Besides the savings banks deposits, the last post-office savings bank return shows $207,999,212.76 to the credit of open accounts in England and Wales on the 31st of December, 1885, of which $14,335,682.16 was due Lancashire depositors. But the chief depositories of the Lancashire workingmen's savings are the co-operative companies, whose records are understood to show a very remarkable degree of prosperity on the part of the people of this district, and which, as further on intimated, will appear in a future report on the "co-operative movement" in Lancashire.

MANNER AND COST OF LIVING.

I am indebted to Mr. Samuel Andrew for the following account of the manner and cost of living of the average workingman of this district.

Housing.—The housing of the average workingman in Lancashire is good, cheap, healthy, and for the most part pleasant.

Passing through Lancashire towns on the railway one is struck with the long rows of dwellings built of brick or stone, according as brick or stone may be more plentiful or cheap in the neighborhood. These are the houses of the Lancashire workingman. They are generally four roomed tenements built two stories high, with back and front door, back yard, and conveniences at the rear. The two lower rooms consist of a living part (fronting a main street) some 15 feet square, communicating with a back kitchen some 15 feet by 12. The floors are flagged for the most part where the houses are not cellared, the stairs ascending from the back apartments. The living part is provided with fire-grate, oven, and boiler. The oven is adapted to general culinary purposes as well as for baking the household bread, for the quality of which the Lancashire house wife enjoys a high and well-merited reputation. The back room is used as a laundry and lavatory, being fitted up with boiler, slop stone, and small pantry. The sleeping apartments up stairs are, as a rule, fairly lofty and airy. The rental of such a house, modern built, would be 4*s.* to 4*s.* 6*d.* per week according to position and quality. Smaller cottages of an older type may be found ranging in rental from 2*s.* 6*d.* to 3*s.*, but they are fast giving place to the better class described. These rentals generally cover all national taxations and for the most part the poor's rate, but as a rule the cottager contributes to local taxation for lighting, police, road repairs, school board, &c., at so much in the pound sterling on the annual rental, or a portion of it. In the thriving town of Oldham, this rate is 2*s.* in the pound (10 per cent.) on the rack rent, payable by three installments. The furnishing of the cottages is neat and substantial, and in recent years the better class workman has been able to possess himself of a piano-forte and to give his children somewhat of a musical education in addition to the ordinary schooling. The ordinary Lancastrian has a great appreciation of music. Workmen's cottages, such as described above, of the better class cost £120 to £140 per cottage for erection, but in most cases a chief rent of 3*d*. to 4*d*. per yard per year is paid by the owner.

Eating.—The Lancashire workman is perhaps the best fed of his class in Great Britain. It is alleged that this is necessary to enable him to endure the hot temperature of the mills and workshops. Leaving home between 5 and 6 in the morning with a crust in his hand, he gets breakfast at 8 to 8.30, often at the mill, generally consisting of bread and butter, tea or coffee, sometimes with a couple of eggs or a rasher of ham or bacon. His dinner, 12.30 to 1.30, is a wholesome meal, almost always in part of meat and pudding or pie, his favorite dishes being a potato pie and a flesh pudding, which on working days form his alternate prandial meals, while on Sundays his dinner is of beef or mutton with pastry.

His third meal is generally his lightest, consisting of bread, butter, cheese, tea, salad, &c., while his supper consists of oatmeal porridge, milk, bread, jam, &c. He generally smokes or chews a vile strong tobacco called "twist," and drinks beer sometimes brewed from harmless herbs, but generally from malt and hops.

Since American beef and Australian mutton began to be so abundantly imported into England, the English workman has found more employment for his knife and fork. There was at first a conceit against foreign meat, but it is generally dying away. Good beef can be bought at 6*d*. to 8*d*. per pound, good mutton at 4*d*. to 7*d*. A preference is given to English-fed meat, and as a rule 2*d*. per pound more will be paid for beef and perhaps in some cases 3*d*. per pound more for mutton, than for foreign meats. American ham and bacon can be bought at 4*d*. to 7*d*. per pound, and American cheese at 4*d*. to 6*d*. The cost of living, on the style above mentioned, of an ordinary workman's family of five persons is said to be something less than 17*s*. to 18*s*. per week. The unskilled laborer with same family has sometimes to live on less than this cost; but perhaps he takes less meat and more tobacco, sometimes chewing and sometimes smoking.

Clothing.—The Lancashire workman in his holiday dress could hardly be distinguished from his employer, so far as dress goes. Clothing was perhaps never so cheap as at present. Huddersfield represents the manufacture of imitation woolen cloths, with a great mixture of shoddy and mungo, suitable for workmen's clothing. Ready-made men's suits can be had made up from these imitation cloths at any price between 18*s*. to 38*s*. and children's suits anywhere from 3*s*. to 18*s*. each. An excellent tweed suit can be bought fit for any man to wear at 50*s*. to 55*s*., and beautiful worsted or woolen suits of the best quality at £3 3*s*. to £4 4*s*.

Women's garments are as cheap in proportion, and the factory girls dress well when away from the factory, with a tendency to be a little loud. Moleskins and fustians are less used than they used to be as factory gear by the British workman, who as a rule adopts his cast-off Sunday clothes for the purpose. The wearing of clogs is still a great institution in Lancashire, as well in the interest of health as of cheapness.

WAGES.

Wages in cotton factories are at present 15 per cent. below the standard list, but this does not mean that the hands are earning 15 per cent. less than the standard. Indeed, factory hands are now earning more than they did in 1870. The producing power of the operative has been increased by about 10 to 15 per cent., but he has an allowance for increased speed to the extent of one-half, and when it is considered that the machines have been increased in spindles and improved in structure it is doubtful whether he is not receiving more wages to-day than ever he did before. When the cost of provisions is taken into account, the position of the factory operative in full work is at least 20 per cent. better than it was in 1870.

This estimate refers to hands in full work. Many of those who have been thrown out of work have suffered severely. There is not much short time in the mills. The idea seems to prevail that it pays best for a mill to run full time or to stop altogether.

WEALTH AND THE LIBERAL ARTS.

While Lancashire contains 13.3 per cent. of the population of England and Wales, the latest tax returns to be had (1883–'84) show that it pays 14.1 per cent. of taxes. The difference, however, is much more striking when the returns for the profits of business and industry only are considered, in which Lancashire's share is 16 per cent. This will more fully appear from the following comparative table:

XLIX.—*Gross amount of property and profits assessed*, 1883–'84.

Sources of income, &c.	England and Wales.	Lancashire.
From the ownership land, tenements, and titles	£154, 044, 183	£18, 706, 453
From occupation of lands and tenements	44, 780, 800	1, 857, 443
From trades and professions	243, 747, 555	38, 982, 881
Tax, 5*d*. in the pound	7, 839, 316	1, 107, 072

NOTE.—The incomes from public dividends and annuities and from Government offices and pensions are not applicable to statistics of the separate counties.

The difference would be even more striking if similar returns could be had for the Manchester district as distinguished from the county.

Very substantial people, therefore, are the Manchester men, as their general characteristics, no less than their income returns, demonstrate; yet they have not disdained those lighter accomplishments which follow in the train of wealth. In art,* architecture, music, and the drama they have pushed their city to the first rank in the Kingdom after London itself. What position they held in literature and science may be inferred from the establishment here, in 1880, upon the foundation of Owens College, of the only university in the north of England. This seat of higher education exercises academical jurisdiction over the "University College" of Liverpool, and will probably eventually extend over the "Yorkshire College" of Leeds. Naturally the first free library in England (1653) was established in Manchester, and the free libraries of the city (including Salfra) now contain 200,000 volumes. In the Owens College the department of physical sciences, under Sir H. E. Roscoe (president of the British association for next year), probably supplies the best instruction to be had in the United Kingdom in those branches of education which are the handmaids of industrial advancement.

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*It is understood that leaving out the collections in the Royal Academy (London), the country within a radius of 20 miles from the town hall in Manchester contains works of art of greater value than a similar area about the Mansion House in London.

IMPROVED CONDITION OF THE WORKING CLASSES.

So much may be said for the greater folk. Under the same influences that have produced this vast wealth for the wealthy, the middle and the humbler classes have advanced to a degree of comfort never known by them before. Indeed there is not the same difference between the very rich and the lower classes which exists in many communities of the same wealth in our own country. The "line between the employing class and the employed" is perhaps "harder and sharper" than with us; but within the limits of this restriction, the great body of the people are more nearly on an equality than in similar communities in America, or, perhaps, it would be more exact to say that there is not so wide a social range as in such communities in America. Whatever may be the cause, the efforts of the laboring class to secure its share of the joint earnings of capital and labor, and of each class as against its superior in the social scale, so far as the capacity for earning a livelihood goes, seem to be more efficacious here than in similar communities in America.

So evident to a transatlantic visitor who takes the pains to look beneath the surface is the view I have expressed of this matter, that Prof. Goldwin Smith, on revisiting England the other day, was led to say, speaking of the whole country:

> Nothing seems more certain than that the largest portion of the newly-made wealth has gone to the class which lives by wages, and that this class has suffered least by depression. Profits have fallen and wages have risen, as political economy, now so much despised, said that they would. Low profits and reduced rents to the people mean cheap clothing and cheap bread. Articles of popular consumption are very cheap, while the range of popular consumption is evidently growing larger. Economic laws have done, and are doing, what the labor agitator wants to do by industrial war. The thrifty artisan, so far as I can see, is just as well off here as he is in the United States, saving that the line is harder and sharper here between the employing class and the employed. That "the rich are always growing richer and the poor poorer" seems to be the reverse of the truth.

So, also, it is the rapid growth of population in the northern industrial centers which offers the one barrier to that sucking of the life of the provinces into London, which Lord Roseberry deplored, the other day, at Linlithgow. This industrial concentration, away from London, does not restore the English country life which Lord Roseberry lamented the decline of, but it gives many millions of toiling men and women better lives than otherwise would be possible for them.

The vast improvements constantly making in labor-saving machines, which have reduced the number of persons engaged in agriculture from 1,657,138 in 1871 to 1,383,184 in 1881, have imposed an additional burden upon the industries, already sufficiently taxed, one would think, in supplying employment for the increasing population. A like decrease has occurred in the numbers engaged in the shipping business, notwithstanding an enormous increase in the carrying capacity of its fleets, and this adds still further to the burden upon the remaining industries. "A workingman," discoursing upon last winter's distress among the laboring classes, recently wrote to one of the newspapers as follows:

> When I said that economic forces are operating against the unskilled laborers, it was meant that the rough work of the world is being put more and more upon the shoulders of machinery. * * * The constant stream of laborers which is flowing from the agricultural districts to the towns is due to the increasing application of machinery to agriculture. Our roads are kept in repair by machinery, and the very stones are broken by the same means. Masons are supplied with mortar which was prepared by machinery, and the manufacture of bricks is almost entirely accomplished by machinery. Mechanical contrivances for the loading and unloading of ships are ming more into use, and an apparatus has been devised which performs the dutie

of cash-boys in large shops. These are only a few obvious instances. The same process is going on in the mines and factories. Society as a whole derives benefit from these changes, and skilled laborers derive a special benefit on account of the demand thus created for the labor they have to dispose of. But the employment of the unskilled laborers is taken from them, and their lot, already too hard, is made harder still.

Harder, without doubt, but harder only for the particular individual whom these appliances have displaced. Not harder for the class which he now ceases to represent, on the contrary, incomparably easier, as the statistics of paupers, who are the final residuum from the overcrowding of the ranks of the unskilled laborers, and whose fluctuating numbers measure the sufferings of this class, plainly show. As will be seen, the table given further on exhibits the percentage of pauperism for five periods since 1850, which has steadily declined from 5.11 per cent. in that year, to 3 per cent. on the 1st of January of the present year.

Without pursuing the subject further a notable illustration of what I mean, viz, that the forces, whatever they may be, that control the relations of capital and labor here favor the laborer more than such forces do in similar communities in our country is to be found in the extent and degree of success attained by the co-operative movement in this district. This is not short of astonishing; and in a future report I shall endeavor to make plain how much our workingmen have to learn in this respect from their more fortunate brethren here.

INCREASE OF LEISURE.

The people of all classes here enjoy much more leisure than the same classes with us; and notwithstanding the increasingly heavy odds at which the Lancashire laborer contends with those who live in newer countries, where the raw material upon which his own labor is expended is produced, and where pressure of population, the heaviest handicap upon wages in the industrial race, is entirely wanting, he scores a continued gain in this respect on his employer. Comparing the condition of the working classes, especially those of the Manchester district, with their condition forty years ago, Mr. Jacob Bright recently said that they now had practically two Sundays in the week, and a considerable portion of Saturday besides.

DECLINE OF INTEMPERANCE.

The Examiner and Times newspaper of this city abridges from the last report of the inland revenue commissioners the following tables:

I.—*Consumption of wine, beer, and spirits, tea, coffee, and cocoa, per capita, in each of five years named, beginning with* 1852.

Date.	British spirits.	Foreign and colonial spirits.	Foreign wines.	Beer.	Tea, per head.	Coffee, per head.	Cocoa, per head.
	Gallons.	*Gallons.*	*Gallons.*	*Barrels.*	*Pounds.*	*Pounds.*	*Pounds.*
1852	.916	.177	.231	.608	1.909	1.207	.121
1862	.644	.177	.334	.661	2.694	1.178	.124
1872	.844	.285	.527	.885	4.010	.976	.245
1882	.809	.236	.406	.766	4.676	.885	.338
1885	.783	.221	.379	.746	5.022	.898	.402

It appears from these figures that the people of England consume less of spirits and coffee, and more of beer, wine, tea, and cocoa, than they did a third of a century ago.

IMPROVEMENT IN MORALS AND DECREASE OF PAUPERISM.

The registrar-general's report for 1885 shows that in England and Wales a great and steady improvement is taking place in the percentage of illegitimate births. In 1845 they were 7 per cent.; in 1855, 6.4; in 1865, 6.2; in 1875, 4.8; and in 1884, 4.7—the last being the lowest figure ever known.

The following table is compiled, for the first four dates from Mr. Mulhall's tables, for the last from the registrar-general's report:

LI.—*Decline in pauperism since* 1850 *in England and Wales.*

Years.	Number of paupers.	Ratio to population.
		Per cent.
1850	921,000	4.11
1860	851,000	4.26
1870	1,079,000	4.69
1880	803,000	3.09
1886	813,000	3.00

LII.—*The decrease in the burden of pauperism from* 1702 *to* 1880.

[As shown in another of Mr. Mulhall's tables.]

Period.	Annual expenditure.	Per inhabitant.	National income.	Percentage of burden.
		Pence.		
1702-'14	£910,000	41	£65,000,000	1.40
1760-'75	1,520,000	58	122,000,000	1.24
1783-'93	2,050,000	66	145,000,000	1.41
1815-'20	7,106,000	152	220,000,000	3.23
1830-'35	6,742,000	114	385,000,000	1.75
1841-'50	5,250,000	74	490,000,000	1.07
1851-'60	5,510,000	69	580,000,000	.95
1861-'70	6,740,000	77	720,000,000	.94
1871-'80	7,710,000	75	935,000,000	.82

Not less marked was the increase in thrift among the laboring classes as indicated by the increase in the deposits in savings banks since 1830, as shown (for the United Kingdom) in the following table:

LIII.—*Deposits in savings banks from* 1830 *to* 1881.

Years.	Amount.	Per inhabitant.
1830	£12,600,000	$4 88
1840	20,700,000	6 08
1850	27,680,000	7 80
1860	36,700,000	9 00
1870	46,230,000	9 73
1881	69,000,000	13 13

PRISON STATISTICS—DECREASE OF CRIME.

The Courier of this city prints the subjoined review of the official criminal statistics for England for 1885, just published (November).

These give evidence of a steady decrease of crime, and recently of a greater proportionate decrease in the number of female criminals:

> From the yearly reports relating to our convict prisons we are enabled to gauge with considerable accuracy the amount of crime that from one period to another is prevalent in the country, and it is certainly a matter of no small satisfaction to learn from the report just published that the number of sentences to penal servitude inflicted by the courts in England and Wales during the past year was 23 per cent. lower than in any previous year on record. This decrease in sentences for serious crime is, moreover, not of a temporary nature, owing to some transitory cause, but one that shows a continuous and progressive tendency.
>
> During the five years ending in 1864, the average number of persons sentenced to penal servitude in the year was 2,800, and whilst these figures had dropped to 1,622 as the yearly average for the five years ending in 1874, a further diminution has reduced the average to 1,427 for the five years ending in 1884, and the actual number to 1,027 for the year ending in March, 1886; and this progressive decrease is all the more remarkable when we take into consideration that since 1864 the population has increased by over 7,000,000.
>
> Another matter to which attention is directed in the report is that the decrease in the number of female criminals is in proportion larger than in the number of males. Of the total number of 1,027 males and females that received different sentences during the year, 708 were known to have never before been convicted; and on analyzing the crimes committed by these last we find, as in previous years, larceny and receiving stolen property still easily heads the list with a total of 219, followed by burglary, which accounts for 83 cases; rape, &c., with 74 cases, and wounding, shooting, &c., with 48.
>
> During the twelve months there have been 25 murders, as against 38 in the previous year, and under the heading of robbery with violence the figures have dropped to 26 from 106 in 1884, and an average of 82 for the three previous years. The actual population in the prisons at the date of the last report is given as 8,396, of which number 821 were females, and of this total 3,344 were confined under sentences of five years.
>
> Some curious statistics are given with a view to point out at what ages criminal propensities are most commonly developed, and from these we learn that while a far greater preponderance of criminals are to be found amongst males at ages varying from twenty-five to thirty-four, the female criminal does not become fully developed so early in life, and with that sex those at ages varying from thirty-five to forty-four easily bear off the palm of crime. To house our criminals twelve establishments were maintained during the past year, with a total staff of employés numbering 1,500. The gross total of expenditure in all these establishments amounted to £299,876, and by deducting from these figures the value of the convict labor (which was estimated at £164,271) and making allowance for some small sums obtained by the sale of old stores, &c., the net cost of our convict prisons last year amounted to £134,462.
>
> The net charge per prisoner was, therefore, about £16 2*s.* 6*d.* Thus it appears that the expenses of convict establishments are very considerably reduced by the labors of the convicts themselves. For many years past a large number of convicts have been employed on Government works at Portland, Portsmouth, and Chatham, and now that these are completed, fresh employment has been found in making the harbor at Dover and on a new work for the war department at Luton, near Chatham. The number of soldiers, sailors, and marines at present in the convict prisons under sentences passed by courts-martial amounts to 126 and shows a great improvement over last year, when there were 200 and greater still over the previous year, when there were 350. The institution of the star class, in which are concentrated prisoners who are known to have never before been convicted, and not to belong to the criminal class, has been found, we are told, to work very satisfactorily; and so far as it has gone there is reason to think it is successful in its object of preventing prisoners who enter prison unversed in crime from coming under evil influences while serving out their sentences. It is, in conclusion, satisfactory to find that the Discharged Prisoners Aid Societies are doing good work, and in the past year we learn that out of the total number of 1,815 male prisoners liberated, 1,256 were taken in hand by one or other of these societies, and of the 254 women discharged 76 received assistance.

The report of the commissioners of prisons also shows that whereas there were 20,833 persons in prison in the United Kingdom on the 31st of March, 1878, there were but 15,375 in prison on the same day of 1886—12,467 males and 2,908 females. Considering the increase of population meanwhile, some 3,000,000, it is evident that the number of tenantless prisons must increase. During last year, the prisons of Huntingdon, Clerkenwell and Coldbath Fields were closed; Pentonville convict prison was made a local prison; and a portion of the prison at Bodmin is about to be transferred to the admiralty for naval purposes.

The following table, prepared from Mr. Mulhall's tables and the census, further illustrates this subject:

LIV.—*Convictions for crime in England and Wales since* 1840.

Years.	Annual average.	Population.
1840–'49	21, 280	16, 752, 000
1850–'59	18, 291	18, 838, 000
1860–'69	14, 530	21, 202, 000
1870–'79	11, 720	24, 108, 000

BETTER HEALTH AND LONGER LIFE.

A prevailing characteristic of the inhabitants of this county, as will have been seen, appears to be an extreme manifestation in everything that tends to mark the individuality of a people. And even when we come to consider some of the things over which the circumstances of life leave it least control, this unique community shows no deviation from the rule that seems to govern it. The statistics of life and death show, unfortunately, that Lancashire stands at the head of the list of the counties in its annual death-rate, which, in the decennium 1871–'80 was 25.17 per 1,000 persons (26.99 males and 23.46 females), whereas the rate for England was 21.27 per 1,000 (22.61 males and 20.00 females). After Lancashire come Durham, 23.77; the West Riding of Yorkshire, 23.24; Northumberland, 22.74; Staffordshire, 22.44, and the city of London, 22.37.

If, however, we consider the decline in the death rate which has taken place in Lancashire in the decennium 1871–'80 as compared with the decennium 1841–'50, it appears that the improvement in the health of its people has been scarcely less marked than their improvement in other respects—such decline being from 28 per 1,000 in 1841–'50 to 25.2 per 1,000 in 1871–'80, or 10 per cent.; whereas for all England the decline is from 22 in 1841–'50 to 21.3 in 1871–'80, or but little over 3 per cent. And this notwithstanding the fact that the breathing space or elbow-room of the average Englishman—which was 2¼ acres in the earlier period and something over 1½ acres in the later—has been reduced only 30 per cent.; whereas, in the same time, the dwellers in Lancashire have suffered a diminution of these privileges to the extent of 40 per cent., their breathing-space and elbow-room having been a little under three-fourths of an acre in the earlier period, and in the later period not much over a third of an acre. Again, the full value of this disproportionate improvement in the health of the people of Lancashire, as compared with the rest of England, will be more strikingly illustrated if we consider the greater intensity of the effect of the pressure of population after a certain degree of density of population has been reached. In his official report to the registrar-general for last year, Dr. Ogle, summing up the results of a comparison of several groups of districts, says:

> It is not apparently until the density has reached a certain degree of intensity that it begins to exercise any appreciable effect. This, indeed, might have been anticipated. For though we can readily understand that in crowded communities it may be a matter of vital importance whether there are 500 or 1,000 or 2,000 or more per-

sons living on a square mile, yet it can scarcely make any difference, so far as health goes, whether in rural districts there be 2 acres or 3 acres on an average to each inhabitant.

The differences in the death rates in these sparse populations are determined by other conditions than aggregation.

There seem to be no natural causes for the comparatively high death rate in the case of Lancashire. The climate, taking it all in all, is healthy, the drainage good, the water supply abundant and pure, and the attention given by the authorities to sanitary matters generally, very great. I have no statistics upon which to base a comparison in this respect with the rest of England; but I should say, from the general character of municipal work in this district, and the large proportion of the district which is urban, that the people of Lancashire are at least as well cared for, in the matter of health, as any of their neighbors. The explanation must be sought, therefore, in the artificial conditions of life of the people. The density of population which, as has been pointed out, is twice as great as that of any other county outside of London, is, without doubt, one of the chief causes. But this does not account for all the difference, for London shows a lower death rate than either of the five districts enumerated above. These, however, are all industrial districts, and it would appear that there is something in the nature of the work done which tries the health in one way or another; for example, the muscular strain required in boiler and machine working; the dangers as well as the lung-destroying dusts of many kinds of mining and metal-working; the overheat of the weaving sheds and the cotton and mineral dust given off therein; the dense fog of steam in which the dyers, bleachers, and printers work; the noxious fumes from the great chimneys that fill the air.

Says Dr. Ogle:

> The direct consequences of close aggregation are probably as nothing in comparison with its indirect consequences or concomitants. * * * Moreover, and perhaps more than all, it is in these crowded communities that almost all the most dangerous and unhealthy industries are carried on. It is not so much the aggregation itself, as these other factors which are associated with aggregation that produce the high mortality of our great towns or other thickly-populated areas.*

Speaking of the cotton industry, he says:

> In the cotton factories the temperature of the weaving sheds is described in a recent report by Dr. Bridges to the home secretary as "tropical and relaxing," and dust, composed partly of filamentous particles of cotton and partly of mineral substances used for sizing, is stated to be a notable feature in most of the sheds.

In harmony with these facts, the statistics of the causes of death show that the deaths in Lancashire from phthisis and diseases of the respiratory system averaged, during the years 1870-'80, 30 per cent. of the deaths from all causes.

Applying Dr. Ogle's rules, viz, that the direct consequences of close aggregation are as nothing in comparison with its indirect concomitants, and that more than the direct and all the other indirect effects of aggregation combined are the dangerous and unhealthy industries which exist in such communities, it does not seem difficult to draw the general conclusion that it is a combination of the two causes, aggregation in its simpler form and aggregation as the forerunner and concomitant of dangerous and unhealthy industries, which produces the high death rate in London and in Lancashire; and that it is the greater death-causing power of that element which predominates in Lancashire (viz, the industrial) than that which predominates in London (viz, excessive aggregation leading to commercial rather than industrial development) which produces a higher death rate in sparser-settled Lancashire.

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*The indirect effects of aggregation omitted from this quotation and represented by asterisks, are "abject want, filth, crime, drunkenness, and other exceses, keener competition, and feverish and exhausting conditions of life." These would doubtless be greater in London than in Lancashire. On the other hand, London attracts a larger proportion of the leisured classes, and, being all urban, its sanitation should be more effective.

A new life table, based on the returns from 1871–'80, is given in Dr. Ogle's report, which shows the average expectation of life of a male English infant at birth to be 41.35 years, against 39.91 years by the old table (1838–'54) a gain of 1.44 years, or nearly a year and a half. For females the new table shows 44.62 years against 41.85 in the old, a gain of 2.77 years.

In his inaugural address at the opening of the sanitary congress at York, in September, Sir T. Spencer Wells, the president of the congress, said:

> When they spoke of the prolongation of life, they thought chiefly of the advantage to individuals, their better health, and their augmented power of enjoyment. That was a great deal, but it meant more for the state. During the forty-nine years that registration had been in force, about 8,000,000 had been added to the population of the United Kingdom.
>
> They would not be far away if they put the average duration of life in Great Britain before a century ago at about thirty years; now, according to the healthy life table, it was forty-nine years, and each individual of the 8,000,000 increase in the population was worth to the state £150; and if only 2,000,000 of the increased number was the fruit of sanitary and medical work, their economical value was at least a clear gain of £300,000,000 since the foundation of the sanitary institute.

INCREASED CONTENTMENT OF THE WORKING CLASSES.

After writing the foregoing portion of this report it occurred to me that the conclusions to which the facts and figures therein contained had irresistibly forced me, were so completely at variance with information hitherto furnished to the Department that I determined to test them by an appeal to eminent authority. I accordingly addressed identical notes to Sir J. C. Lee and Mr. Provand, M. P., containing a request for the favor of a reply to these two questions:

> (1) In your opinion, do not the people of the Manchester district emigrate to a less extent than those of the rest of England in proportion to population? My investigations lead me to believe that such is the case.
>
> (2) If so, is it not due, in your opinion, to the fact that such a large proportion of the population of the district is engaged in the cotton industry, and that the operatives in this industry are increasingly contented to remain at home because they are getting a larger share than formerly of the joint earnings of capital and labor?

Following are the replies of these gentlemen:

Sir J. C. Lee to Consul Hale.

56 MOSLEY STREET, *Manchester*, *November* 12, 1886.

DEAR MAJOR HALE: In reply to your note of the 9th instant, I have great pleasure in making the following statements, from which I think you will be able to deduce the information you desire.

I should class the various grades of labor in our community under five heads:

	Per cent
(1) First-class skilled labor	10
(2) Second-class skilled labor	15
(3) Third-class skilled labor	25
(4) Unskilled labor	40
(5) Useless people	10
	100

Those in the first and second classes are in receipt of good wages, and rarely emigrate. Being good workmen they can obtain steady employment, have few taxes to pay, their house rent is very moderate, and their food exceptionally cheap.

Those in the third class, being younger men, are inclined to ramble, but not to a great extent, as they have all the advantages of their more skilled brethren, with the one exception that they cannot depend upon such steady employment.

The fourth class is the one that supplies the largest quota to the emigration returns, but so long as they can get employment they do not go away in large numbers, for the reason that their food and rent are cheap, and in hard times they can get assistance from the union and from private charity.

The fifth class does not emigrate. It consists of aged and impecunious persons—mostly paupers, many of whom eke out a living in a desultory way by a little occasional work, and are more or less chargeable to the union, when by idleness or want of thrift they are brought within a measurable distance of starvation.

As a whole the people of this district do not look upon emigration with favor, and I do not think we supply any large number of emigrants—certainly not in proportion to our population. The industries in the Manchester district are very varied, *e. g.*, cotton, iron, and chemical branches of trade, and there is always a good demand for good work people, who are in receipt of relatively higher average wages than has ever been known in my time.

Trusting that this brief expression of my opinion on this point may be of any use to you,

Believe me, very faithfully yours,

JOSEPH C. LEE.

Major HALE,
United States Consul, Manchester.

Mr. A. D. Provand, M. P., to Consul Hale.

38 LLOYD'S HOUSE, ALBERT SQUARE,
Manchester, November 12, 1886.

DEAR MR. HALE: On my return from London I received your note of the 9th instant. I have to reply to your two questions as follows:

(1) It is the case that the Lancashire people emigrate less than those of most of the other counties in England. So far from emigrating the increase of the population of Lancashire has for a long time past been added to by immigration, the increase as shown by census returns having been greater than would have been the natural increase. For the ten years ending 1881 the average increase throughout England (I am not now speaking of any other part of the United Kingdom) was 15 per cent., but the increase in Lancashire was 22½ per cent. West Yorkshire, which is also a manufacturing district, and contiguous to Lancashire, has likewise increased in population at a higher rate than would have been the case without immigration. The increase for the whole of Yorkshire has been 18½ per cent., but this has been chiefly in the western districts, and if the figures for this part of the county were separately obtained the increase of population would no doubt be as high, if not higher, than in Lancashire.

(2) The foregoing is due to the fact of the continued extension of the manufacturing industries in Lancashire during the past fifty years, and also to the fact that this extension has taken place away from the seaboard, for, notwithstanding that Liverpool is in Lancashire, almost the whole of the industries are carried as in the interior of the county. This prevents the growing up of maritime tastes, which lead to emigration. Another point to be noted is that the earnings of the cotton operatives are in some departments higher to-day than they ever were at any previous time, and in no departments are they less than they were. I use the word "earnings" and not wages because, although the nominal wages are less in many districts on account of the speeding of the machinery and other causes, the earnings, as I have said, are in some cases greater, and in all other cases as great as they have ever been.

I am yours faithfully,

A. D. PROVAND.

Maj. E. J. HALE,
Consul of the United States, Manchester.

It is not necessary to point out the complete coincidence of the statements of these two gentlemen with the deductions already made in this report, even in several important particulars outside the immediate scope of the inquiry addressed to them.

Sir J. C. Lee, who was knighted in 1882 for his eminent services in connection with the negotiations for renewal of the French treaty, is probably the highest authority on commercial matters in the Kingdom.

Mr. Provand is the very able member of Parliament whose opinion was sought (together with that of Sir J. C. Lee and some others) by the British foreign office, and embodied in the official memorandum on the subject of the character of consular reports, which the Department of State has recently issued for the information and guidance of the consuls of the United States.

CAUSES OF THE GROWING CONTENTMENT OF THE WORKING PEOPLE.

The shifting of the wealth of the nation, as indicated by the income-tax returns, more and more towards the industrial and commercial classes is not a less marked feature of the past forty years than the vast accumulation of wealth[*] itself which has taken place in those years. It is not possible also to determine from the returns what class of the beneficiaries just mentioned has received the greater proportionate share of the benefit. But the statistics and testimony here adduced tend to the conclusion that the advantage rests with the employed; and this conclusion, while probably true as to the whole country, is more certainly true as to this district.

The following tables, for the United Kingdom, extracted by Mr. Mulhall from the official "statistical abstract," throw further light upon the causes of the growing contentment of the people:

LV.—*Paupers.*

Year.	Number.	Per 1,000 inhabitants.
1850	1,308,000	48
1860	978,000	34
1870	1,279,000	41
1880	1,016,000	29
1885	982,000	27

LVI.—*Criminals.*

Years.	Committals per annum.	Per 1,000 inhabitants.
1850–'59	41,424	151
1860–'69	27,605	92
1870–'79	22,812	69
1880–'85	20,763	50

LVII.—*Children at school.*

Political division.	1875.	1885.	Per 1,000 inhabitants.	
			1875.	1885.
England	[†]1,863,200	3,371,300	76	123
Scotland	312,300	455,700	89	117
Ireland	389,900	502,450	74	103
United Kingdom	2,565,400	4,329,450	78	120

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[*] The growth of wealth in England and Wales can be inferred with sufficient accuracy for the present purpose by a comparison of the assessments for the income tax, which were £227,803,132 in 1846, and more than double, or over £500,000,000, in 1884.

[†] The number in 1850 was but 197,578.

LVIII.—*Annual average of letters posted.*

Period.	Millions of letters.	Letters per inhabitant.
1841-'50	277	10
1851-'60	466	17
1861-'70	724	25
1871-'80	982	30
1881-'85	1,310	37

Compared with population, the number of letters last year was forty-three per head in England, thiry-two in Scotland, and eighteen in Ireland. During the past ten years the number of telegraphic messages has risen from twenty-one to thirty-nine millions, an increase of 86 per cent.

LIX.—*Bankruptcy.*

Period.	Number of bankrupts.	Amount.	Ratio of assets.
			Per cent.
1871-'76	8,038	£20,200,000	31
1877-'82	11,167	25,400,000	29
1883-'85	6,072	18,100,000	31

LX.—*Consumption of alcoholic drink.*

Year.	Gallons per inhabitant.			Equivalent in alcohol.
	Beer.	Spirits.	Wine.	
1875	34.2	1.29	0.53	2.83
1881	28.6	1.08	0.44	1.93
1885	26.8	0.97	0.38	1.79

The consumption was 30 per cent. higher in 1875 than it is at present. It is still higher in England than in the sister kingdoms, the average of alcohol consumed being 1.90 in England, 1.67 in Scotland, and 1.23 in Ireland, per inhabitant.

LXI.—*Food.*

Articles.		1875.	1885.
Meat	pounds	95	106
Sugar	do	63	74
Tea	ounces	72	80

LXII.—*Thrift.*

	1875.	1885.
Savings banks	£67,000,000	£94,000,000
Mutual societies	20,000,000	62,000,000
	87,000,000	156,000,000

The accumulations of the working class under the above two heads have averaged seven millions sterling per annum.

ASSISTED EMIGRATION.

Up to this point only that portion of the emigration from this country which proceeds voluntarily and without aid has been commented upon. The statistics given include, of course, all emigration; but my comments have been restricted, as just stated. As there is practically no deportation from the United Kingdom of chronic paupers, or insane or other helpless persons, it will be necessary now simply to consider the question of "assisted emigration."

It has been shown elsewhere that the laws of this country have succeeded for some forty years past in counteracting the motive to emigration in a steadily increasing degree, and that this has occurred notwithstanding the enormous increase of the motive, so far as it depends upon natural causes. But consummate as the Briton's economic genius has been shown to be, it has not yet been able quite to overcome its adversary's start. As soon as hard times increase the pressure of surplus population, attention is more earnestly directed to this cause of labor competition. The continued depression of trade, which existed, without serious check, up to a few months ago, redoubled the efforts of those who look to relief from emigration. The effect of these efforts, as made by those who were chiefly interested, whether from philanthropic or personal motives, in reducing the competition, may be thus stated:

There was a debate in the House of Lords on the subject of emigration to Canada, in March, 1884. Subsequently there was formed a "national association for promoting state-directed colonization," under high patronage and with a powerful executive committee. The national council connected with this association embraces the names of many representatives of several trades in various parts of the Kingdom, among them representatives from thirteen of the principal towns in this district. In March last a deputation from this association, headed by Lord Brabazon, its president, waited upon Earl Granville, then secretary of state for the colonies. And in April a debate ensued in the House of Lords, from the published accounts of which the following extracts will be interesting:

Debate in the House of Lords April 2, 1886.

"In the course of ten years, from 1871 to 1881," said the Earl of Harrowby, "about 3,250,000, or nearly the population of London, had been added to England and Wales alone, and since the last census nearly 1,500,000 more must have come into existence. There was every reason to fear that agriculture must provide less and less occupation every year. Between 1871 and 1881, 1,000,000 acres had been converted from arable to pasture, and in 1881 the number of proprietors and attendants on agricultural machines had increased to 4,200 from 2,100 in 1871. Then in 1861 there were 172 dwellers in towns to every 100 in the country, but in 1871 the proportion had risen to 192 and in 1881 to 212; and there was no reason to hope that the extension of small holdings and allotments, desirable as this was, could furnish anything like an effective counteraction to this tendency. The fact that there was not yet apparent much suffering among the higher class of our operatives was only evidence of the reluctance of this class to make its privations known. Then there was a keen competition with foreign immigrants who are content with worse fare than our own artisans. The prospect of our manufacturers being able to supply means for this growing population was anything but promising."

Lord Harrowby then looked "to see how far emigration was affording the relief required at the present time. The figures were very curious and surprising. The English emigrants numbered 63,000 persons in 1877, 183,000 in 1883, 147,000 in 1884, and 126,000 persons in 1885. The figures relating to Scotch and Irish emigration told exactly the same tale. The number of Scotch emigrants was 8,000 in 1877, 32,000 in 1882, and 21,000 in 1885, while the number of Irish emigrants was 22,000 in 1877, 105,000 in 1883, and 60,000 in 1885. The diminished number of emigrants last year might be accounted for partly by the state of the labor market abroad and in the colonies; but however that might be he contended that emigration had not afforded that relief which the state of our labor market required. The returns relating to net emigration were still worse than those to which he had just referred. Taking British and Irish emigration only, after deducting immigrants and emigrants, the numbers were 31,000 persons in 1877, 246,000 persons in 1883, and 122,000 persons in 1885. These were the numbers of persons who had been actually deducted from the labor market of this country. He feared that instead of voluntary emigration being in our hour of need a great resource, it was more and more ceasing to supply our need. This question had been brought forward on two occasions within the last twelve months. An important meeting was held at the Mansion House, and since then the noble earl who presided over the colonial office received in February an important deputation headed by Lord Brabazon. That deputation represented 170,000 workmen, and they made two requests. The first was for state-directed emigration, viz, state-planned new settlements with special arrangements, and state loans to enable settlers to go out. He believed that boards of guardians were now empowered to use the rates for emigration. But this was a very grave and serious matter, and he would like to know more about the details of it before he gave a decided opinion in favor of it. At all events the subject was clearly worthy of consideration. The second great point pressed upon the Government was that information should be given to every part of the country as to the colonial opening; that is to say, that the colonial office should get the best information together and forward it to many centers throughout the country. He believed a great deal of good would be done if that suggestion were acted upon."

The Earl of Iddesleigh said, "I hope that the inquiries we have heard of to be made by the colonial office, in conjunction with other departments, will not be limited to the prospects of workingmen or emigrants going out of this country, but that they will lead to the furnishing of information likely to be useful, bringing before the manufacturers and people of the country the position and prospects of the colonies themselves."

THE EMIGRANTS' INFORMATION OFFICE.

The final result of the efforts described above was the establishment of an "emigrants' information office" in London, on the 11th of October. In the Guardian newspaper of this city there appeared, shortly before, a history of state-directed emigration from 1834 down to the establishment of the "information office," and a statement of the character and functions of the latter, as follows:

State interference in emigration began in the reign of William the Fourth, taking the form of an act "to empower His Majesty to erect South Australia into a British province or provinces, and to provide for the colonization and government thereof." The preamble recites that "divers of His Majesty's subjects possessing among them considerable property are desirous to embark," and that "it is highly expedient that His Majesty's said subjects should be enabled to carry their said laudable purpose into effect;" and the act provides that three or more "colonization commissioners for South Australia" shall be appointed to provide for the sale or letting of waste lands, and to apply all moneys so received to the purpose of an "emigration fund," to be employed "without any deduction whatever" (except for working expenses and colonial charges) in conveying "poor emigrants" from the United Kingdom to the colony. There is little doubt that considerable jobbery took place under this scheme, and a further development was forced on the Government six years later by the formation of the emigration board in 1840. This consisted of three commissioners with £1,000 each, whose expenditure was met by an imperial "emigration vote" of £1,000, supplemented by proportionate contributions from the proceeds of the sales of land in the several colonies. Reckless sales of land and an unwise policy of selection of "poor emigrants" shortly reduced the majority of the colonial land funds to so low an ebb that in 1843-'44 the tax-payers at home were called upon to provide the whole cost of the emigration board and its staff of agents at the ports. These latter were generally half-pay officers, and their traditional bias to extravagance in expending public money may be traced in the growing proportions of the vote of Parliament they administered. It exceeded £25,000 for 1851-'52, but appears to have gradually dwindled as the colonial governments showed a willingness to resume the expense of shipping their own emigrants. In 1878 the old board of emigration disappeared, but £100 a year has since appeared on the colonial office vote for one of the clerks then transferred to that department "for emigration business." It is this gentleman who will have the chief share in the direction of the new office described below.

Since 1878 there has been an entire cessation of action on the part of the home Government in assisting emigration, whether pecuniarily or otherwise. Strangely enough, however, the establishment of the new "emigrants information office" was due to a movement started during the distress prevalent last winter with a view to obtain state help in furthering a great scheme of colonization. It is true that the National Association for State-directed Labor would indignantly repudiate any idea of state help, but after the interview of Lord Brabazon and his friends with Lord Granville at the colonial office in March last, the representative of the tax-payers could hardly share their views. Their scheme, briefly, was to establish a permanent colonization board under the colonial office, on which should serve, with other persons, the agent general of such colonial governments as should be disposed to co-operate. This board was to obtain grants of land from those colonial governments, and by loan from the Imperial Government to transport to such lands pioneer emigrants, at fixed wages, to prepare the soil for the advent of the detachments of selected emigrant colonists, who were to be located on 80-acre allotments, to be mortgaged to the colonization board for the expenditure to be incurred on behalf of the emigrants. In addition to transport, this expenditure was to cover furniture, implements, and maintenance, until the first harvest, plus administrative and pioneer expenses. The mortgage was to be repaid within a maximum period of ten years, with 4 per cent. interest. It was estimated that two millions sterling would be required in the first year. This scheme, so far as it was connected with the direction of emigration on the credit of the imperial exchequer, met with little sympathy from the government of the day, even though it had the support of Mr. Froude and Mr. Arnold White, and was painted in glowing colors alike by Mr. Alfred Simmons, the secretary to the Kent and Sussex Laborers' Union, and by Mr. Maudsley, representing the Manchester Trades Council. It was urged that there was no margin for possible failures, and there was neither a prospect that the colonies would contribute to the expenditure nor a certainty that they would allot the requisite lands to the proposed board.

On the other hand, it had long been felt by successive Governments that adequate measures were not being taken to spread among the working classes trustworthy information on the subject of emigration. Laborers anxious to emigrate were unable for the most part to obtain a simple statement of the prospects open to them even in a single colony, and there nowhere existed a systematic digest, periodically issued, of the comparative facilities for emigration and of the demand for labor in the several colonies. Whilst, therefore, a distinct objection was raised against pledging the credit of Great Britain in support of a scheme of state-directed emigration, Lord Granville readily adopted the idea of an "emigrants' information office." Considerable difficulty appears to have been experienced in overcoming the traditional reluctance of the treasury to incur new expenditure, but in the end the colonial office carried its point, and the treasury consented to find the money required for the new undertaking. The emigrant's information office thus originated is not a Goverment department. It is merely a subsidized institution having relations with the colonial office. It is managed by an unpaid committee of management, to be nominated by the secretary of state for the colonies, which will include gentlemen prominent in promoting emigration, together with representatives of the laboring classes.

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The committee will be responsible for their expenditure, but they will receive £650 a year as a grant from votes of Parliament towards such expenses, together with franking privileges from the post-office for all correspondence, whether to or from their office. The stationery office will also undertake the committee's printing and supply all stationery free of charge. Taking all these items into consideration, the subsidy from public funds may roughly be estimated at £1,000 a year.

The functions of the emigrants information office will be to collect information through the agents-general from the various colonies, and to tabulate the returns obtained. The publications embodying this information will be of three kinds, to be revised quarterly or more often if requisite. In the first place there will be a general circular, which will be hung up in every post-office in the Kingdom, containing general information for intending emigrants to Canada and the Australasian and South African colonies. This will give succinct particulars of the full cost of passage at steerage rates to the colonies in question, together with the length of passage in each instance. The various rates of free and assisted passages will then appear, and the arrangements made for receiving and temporarily accommodating emigrants on landing. It would seem that emigrants' "homes" exist at nearly all ports of arrival. The intending emigrant will next be advised as to the time most favorable for his appearance in the respective colonies, according to his occupation, and particulars are given as to the colonial demand for the several trades and occupations. It is interesting to note that agricultural laborers and female domestic servants are everywhere in request, as are farmers with some capital; whilst New South Wales makes a special appeal for navvies and men connected with the building trades. The general circular will conclude by giving the names and addresses of the colonial representatives in England to whom, or to the authorities of the emigrants' information office, application should be made for further particulars. In the second place there are special circulars, dealing in greater detail with the facts respecting each of the colonies referred to in the general circular. Each is divided into two parts, the first dealing with passages and the local demand for labor, and the second furnishing important particulars as to the climate, population, products, religion, education, cost of living, and land system. The two latter heads are fully treated, and will be worthy of general perusal by all interested in colonial matters, as well as by intending emigrants. The above two forms of circular will be issued gratis to applicants, but the moderate sum of a penny is chargeable for the third series of the committee's publications, styled "handbooks," in which fuller attention will be given to the points dealt with in the circulars. These handbooks will be procurable through booksellers in the usual way, or from the office direct. It is in contemplation, it is understood, to distribute the special circulars freely to all clubs and associations of the working classes, and to such philanthropic bodies as may seem likely to circulate them among those classes. At the head of each publication issued will be the notice that "the emigrants" information office has been established under the supervison of Her Majesty's Government for the purpose of supplying intending emigrants with useful and trustworthy information respecting emigration to the British colonies. The information issued by the office to the public is mainly obtained from the various colonial governments and their representatives in this country. No pains are spared to make the information as correct as possible, but the committee of management cannot undertake to hold themselves responsible for the absolute correctness of every detail.

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With such unrivaled opportunities of information furnished to them by the two new departments, the wage-earning classes will be in a most favorable position to dispose of their labor to the best advantage; they will know where their services are in request, and there will be no longer any reason why ignorance concerning England's colonial possessions should place intending emigrants at the mercy of the sharks who have fattened on an earlier generation. The great difficulty experienced hitherto has been to select suitable emigrants. Of the unskilled and of ne'er-do-weels there has at all times been a supply far in excess of the colonial demand, but the men that a young colony needs to develop its resources must above all be practical—men aquainted with agriculture and handy with simple tools. For the skilled artisan also, especially if belonging to the building and allied trades, there is an increasing demand. The emigrants' information office should reach these men; and when we say men, it should not be forgotten that female emigration is more urgently needed than male.

There are some three-quarters of a million of women in the United Kingdom in excess of the total male population, but it is calculated that even this immense number would scarcely make up the opposite deficiency in the colonies. There is nothing, however, in the emigrants' information office which will justify any expectations of imperial contributions to the cost of emigration. It will be a center of imparting information and its functions will be strictly defined by its title.

ATTITUDE OF THE GOVERNMENT.

From what has gone before, it will be readily understood that the British Government favors emigration, but preferentially to its own colonies. The idea of "imperial federation," to which the display at the late Colonial Exposition gave impetus, accentuates the preference. Otherwise its attitude and the present state of the law on the subject of emigration, is set forth in a memorandum issued in September by the local government board, as follows:

Expenditure for emigration has, in the case of unions, become a common-fund charge, and where the guardians of a union expend money on emigration the written concurrence on the part of the guardian or guardians of any particular parish in the union is not required. Except in the case of orphan or deserted children under sixteen years of age, guardians of unions can expend money in the emigration of any poor person residing therein, whether actually in receipt of relief or not, but in cases of orphan or deserted children, chargeability is necessary. The guardians of a separate parish can expend money in the emigration of any poor person residing in such parish who is settled therein, or irremovable therefrom, whether in receipt of relief or not. They can also expend money in the emigration of orphan or deserted children who have no settlement, or the place of whose settlement is not known, provided they are chargeable. The local government board have no wish to discourage boards of guardians in the discretionary exercise of their powers of aiding the emigration of poor persons, providing due regard is had to the wishes of the colonies or of foreign countries, and such arrangements are made as are required for the welfare of the proposed emigrants. Strong objections have from time to time been urged on behalf of the colonies against the emigration from England of adult paupers. The colonists are unwilling to run the risk of thus receiving persons of bad character, or those who, from weak intellect or other causes, might become burdensome to them. As regards Canada, the board are informed that assisted passages are only given to farmers, farm laborers, and domestic servants. In consequence of representations which have been made by the Government of the United States, the board feel themselves precluded from sanctioning emigration to that country at the cost of the poor rates. The only cases in which the board consider themselves justified in departing from their general rule in this repect are those in which the emigrants are going to join a relative who is in a position to assist in maintaining them on their arrival, and who have given evidence of willingness and ability to do so by remitting the whole or a part of the passage-money. In cases of this kind the board are willing to consent to the payment of a small sum to cover the cost of conveyance to the port of embarkation, but in no such instance do they sanction the payment of any part of the passage-money or the cost of the outfit. It may be mentioned that, under an act of Congress passed in 1882, passengers arriving in the United States are required to be examined, and if on such examination there is found to be any person unable to take care of himself without becoming a public charge he is not permitted to land. The board are in communication with the Canadian Government with regard to the inspection of orphan and deserted children sent out to the dominion by boards of guardians, and pending the receipt of reports on such inspections, the board are not sanctioning the emigration of orphan and deserted children to Canada. Before deciding to issue an order authorizing expenditure in respect of any proposed emigration, the board require to be furnished with a copy of the resolution of the guardians and with a list and description of the persons desirous of emigrating.

The statistics of emigration are obtained by the Government chiefly from the records of the ship-masters of such vessels as come under the "passengers acts," (section 4, act of 1855, and section 4, act of 1863). The records are prepared in accordance with sections 16 and 17 of the act of 1855, as amended by section 6 of the act of 1863. Copies of these acts, which, as will be seen, contain very complete regulations for the comfort and safety of emigrants, will be found herewith.

SPECIAL PRIVILEGES OR RATES OF FARE.

Emigration from the United Kingdom to other countries than the United States and the British possessions is so insignificant in extent that this division of the subject may be confined to considering the special privileges and rates of fare offered by the latter. There was published in 1877 an official statement—"No. 34, Colonization Circular"—which contained a digest "of nearly all the statutes of states and colonies with which the emigration of the United Kingdom is related," but I have failed to find any one who possessed a copy, and Mr. Giffen writes me that "the board [of trade] regrets that they are unable to supply you [me] with a copy of the colonization circular referred to, every effort to obtain the required number having been without success." By the courtesy, however, of the officials of the new "information office" I am enabled to transmit herewith very late and complete statements concerning each of the British colonies, as regards passages, demand for labor, arrangements for reception on landing, cost of living, rate of wages, general description of the country, land grants, and cost of improved lands.

This information will be found in circulars Nos. 1 to 10, inclosed herewith.

DIGEST OF EMIGRATION—OFFICE CIRCULARS.

The following is an abridgement of the information contained in the circulars:

The time ordinarily taken on voyage, and the lowest rate of unassisted passages to Canada and the Australasian and South African colonies, is as follows:

LXIII.—*Length and cost of passage.*

Colonies.	By steamer.		By sailing vessel.	
	Average time.	Lowest fare.	Average time.	Lowest fare.
	Days.	£ *s.* *d.*		£ *s.* *d.*
Canada	10	4 0 0		
New South Wales	52	16 16 0	About 3 months.	13 13 0
Victoria	49	16 16 0	Nearly 3 months.	13 13 0
South Australia	42	16 16 0	do	13 13 0
Queensland	55	17 0 0	About 3 months.	13 13 0
Western Australia	49	16 16 0	do	14 14 0
Tasmania	40 to 50	16 0 0	do	15 0 0
New Zealand	45	16 16 0	do	13 13 0
Cape	20	15 15 0		
Natal	26 to 28	18 18 0	70 days	*16 16 0

* Second-class.

PASSAGES.

Free passages.—The only colony to which free passages are given at the present time is Queensland, and the system in that colony applies only to single female domestic servants and to agricultural laborers.

Assisted passages, Canada.—Assisted passages cost £3 to each adult—the system applies only to agriculturists, farm laborers, and their families, and to female domestic servants.

Western Australia.—Assisted passages cost £4 to each adult—the system applies mainly to farmers and agriculturists, and a deposit of £100 (to be refunded on arrival in the colony) is required before any assistance is given.

New Zealand.—Assisted passages cost £10 to each adult—the system applies only to farmers and agriculturists with small capital. Before any one of this class receives such assistance he must show that he is possessed of £100, and an additional £50 for each member of his family over 12 years of age.

No assisted passages are given at the present time to New South Wales, Victoria, South Australia, Queensland, Tasmania, or Natal; and in the case of the Cape they are given only to certain emigrants under contract with employers in colony.

Nominated passages.—Queensland, Western Australia, Tasmania, and New Zealand. Residents in these colonies can nominate their friends for free passages on making payments in the colony, as under:

Queensland.—Males, 12 to 40 years of age, £2; 40 to 55, £4. Females, 12 to 40 years of age, £1; 40 to 50, £4.

Passages at low rates are also provided for laborers engaged by Queensland employers for a term of years (for particulars see circular relating to Queensland).

Western Australia.—Without payment, to a limited number of nominees, approved by the Crown agents for the colonies.

Tasmania.—Adult males, not over 40 years of age, £5; females, not above 40 years of age, £5; married couples, not above 45, £6.

New Zealand.—Over 12 years of age, £10. As a rule, confined to agricultural laborers and female domestic servants.

No nominated passages are at present given to Canada, New South Wales, Victoria, South Australia, the Cape, or Natal.

ARRANGEMENTS ON LANDING.

Canada.—Temporary houses or stations for emigrants are provided at the ports of Quebec and Halifax and the other principal towns in the Dominion, and the arrangements made are very complete.

New South Wales.—At times when assisted passages are granted by the colonial government, a home is opened at Sydney for the temporary reception of government-assisted female domestic servants on first landing.

Queensland.—There are stations at the principal ports and in various parts of the colony in which government-assisted emigrants are received free of charge for a few days after arrival.

Western Australia.—There is a station at Fremantle for the reception of government-assisted emigrants.

New Zealand.—There is a station at every principal port for the reception of government-assisted emigrants.

None at present in Victoria, South Australia, Tasmania, the Cape, or Natal.

BEST TIME OF ARRIVAL.

Canada.—April to June (for agricultural laborers); not the winter months.

New South Wales.—Any month; September for preference.

Victoria.—Any month; September for preference.

South Australia.—May to October.

Queensland.—April to October, inclusive.

Western Australia.—September.

Tasmania.—October.

New Zealand.—October to February, inclusive.

Cape.—About July (for agricultural laborers).

Natal.—Any month; August for preference.

PRESENT DEMAND FOR LABOR.

Canada.—There is an opening for tenant farmers with capital, for male and female farm servants, and for female domestic servants.

New South Wales.—There is some opening for persons connected with the building trades, for railway and agricultural laborers, and for female domestic servants.

Queensland, Tasmania, and Western Australia.—There is a demand for agricultural laborers and female domestic servants.

Little or no demand in Victoria, South Australia, New Zealand, the Cape, and Natal, except for female domestic servants.

In all the colonies there is an opening for farmers with capital.

EFFECT UPON EMIGRATION TO THE UNITED STATES.

I am not disposed to think that the special privileges or rates of fare now offered, or which have been offered, by the colonies, materially affect emigration from this country to the United States, except that portion which is contributed by the agricultural classes. Under the heading "the dispersed abroad," the large emigration from Canada to the United States of persons of British origin who had first emigrated to Canada, was noticed. How many of these, if any, may have received assistance in the first instance from the Canadian Government or corporations, there is probably no means of knowing. The juxtaposition of the two countries and the large numbers of recently arrived emigrants, who pass over the border from Canada into the United States, make it necessary, as will have been observed, to consider many questions of emigration from the common standpoint of the two countries. No material error results from this, both because the main features of emigration to the two countries coincide and because the emigration to Canada is so small in comparison with that to the United States that any variation in detail would produce an insignificant effect upon the general result. With Australasia the case is different. It will be remembered that Mr. Giffen's conclusions, as quoted in the first division of this report, which seem to be altogether justified by the statistics, are to the effect that emigration to Australasia "varies not quite in accordance with the emigration to the United States, and appears to be less exclusively determined by natural causes." I have sought to follow out this idea and to ascertain the cause of the difference noted, in a more particular way, as a method likely to disclose also the measure of the effect upon emigration to the United States of the special privileges offered by other governments—chiefly those of the Australasian colonies. By selecting from Mr. Giffen's tables of occupations from 1877 to 1885 the two classes of agriculturists therein distinguished, and comparing them for the United States, Canada, and Australasia, with the number of "general laborers," and with the total number of male adults emigrating to those countries for a series of years, a very fair idea may be had of the disturbing effect of the causes now under consideration.

The subjoined tables seem to show very plainly in what direction the effect is felt.

LXIV.—*Table showing the total number of male adult emigrants of British origin, and the numbers of several classes of such emigrants, who left the United Kingdom for the United States, British North America, and Australasia, respectively, in each of the nine years from* 1877 *(the first year in which nationalities and occupations were both distinguished) to* 1885, *and the average number per annum of each such class during that period.*

[U. S. is used to designate the United States; B. A., British North America; A., Australasia and all other places, "all other places" including the East Indies, British West Indies, Cape of Good Hope, and Natal, and Central and South America. The numbers for all these, however, are small compared with that for Australasia, under which general head it is convenient to classify them.]

Year.	Description.	U. S.	B. A.	A.
1877	Agricultural laborers, gardeners, carters, &c	55	11	4,012
	Farmers and graziers	1,415	145	917
	Total agricultural class	1,470	156	4,929
	General laborers	6,435	920	2,411
	Total male adults	22,790	4,131	22,169

LXIV.—*Table showing the total number of male adult emigrants, &c.*—Continued.

Year.	Description.	U. S.	B. A.	A.
1878	Agricultural laborers, gardeners, carters, &c	96	65	5,936
	Farmers and graziers	2,008	221	1,067
	Total agricultural class	2,104	286	7,003
	General laborers	8,960	1,828	2,913
	Total male adults	28,114	5,977	24,761
1879	Agricultural laborers, gardeners, carters, &c	144	32	3,923
	Farmers and graziers	3,186	256	1,940
	Total agricultural class	3,330	288	5,863
	General laborers	18,584	6,261	3,659
	Total male adults	48,552	10,666	28,583
1880	Agricultural laborers, gardeners, carters, &c	1,007	1,214	1,700
	Farmers and graziers	5,596	428	1,188
	Total agricultural class	6,603	1,642	2,888
	General laborers	42,865	5,085	2,114
	Total male adults	80,475	11,579	20,459
1881	Agricultural laborers, gardeners, carters, &c	336	169	2,168
	Farmers and graziers	3,186	274	714
	Total agricultural class	3,522	443	2,882
	General laborers	50,164	8,115	1,544
	Total male adults	86,239	13,244	23,185
1882	Agricultural laborers, gardeners, carters, &c	312	322	4,504
	Farmers and graziers	3,564	505	797
	Total agricultural class	3,876	827	5,301
	General laborers	52,103	15,413	2,216
	Total male adults	88,233	21,877	29,133
1883	Agricultural laborers, gardeners, carters, &c	190	495	7,409
	Farmers and graziers	4,363	433	1,462
	Total agricultural class	4,553	928	8,871
	General laborers	50,636	16,053	4,145
	Total male adults	88,995	21,534	40,465
1884	Agricultural laborers, gardeners, carters, &c	5,871	355	2,886
	Farmers and graziers	3,023	553	1,550
	Total agricultural class	8,894	908	4,536
	General laborers	33,002	11,086	3,226
	Total male adults	73,498	16,251	28,029
1885	Agricultural laborers, gardeners, carters, &c	5,450	351	3,286
	Farmers and graziers	3,518	285	1,420
	Total agricultural class	8,968	636	4,706
	General laborers	23,506	4,144	3,157
	Total male adults	67,405	10,616	26,140
	AVERAGE.			
	Agricultural laborers, gardeners, carters, &c	1,496	335	3,992
	Farmers and graziers	3,318	344	1,228
	Total agricultural class	4,814	679	5,220
	General laborers	32,123	7,650	2,820
	Total male adults	64,929	12,875	26,992

From the foregoing table another may be constructed which will more completely define the difference between the emigration to North America and that to Australasia, and serve to measure the effect of the causes which produce that difference, as follows:

LXV.—*Table showing the proportions which the "agricultural laborers," the "farmers and graziers," the "total agricultural class," and the "general laborers," severally constitute of the total British male adult emigration to the United States, to British North America, and to Australasia and "other places," respectively, as averaged during the nine years from* 1877 *to* 1885.

Items.	Destination.		
	United States.	British North America.	Australasia and other places.
Total number of male adults	64, 929	12, 875	26, 992
Agricultural laborers, &c	1, 490	335	3, 992
Per cent. of total	2. 3	2. 6	14. 8
Farmers and graziers	3, 318	344	1, 228
Per cent. of total	5. 1	2. 7	4. 5
Total agricultural class	4, 814	679	5, 220
Per cent. of total	7. 4	5. 3	19. 3
General laborers	32, 123	7, 656	2, 820
Per cent. of total	49. 5	59. 5	10. 4

It thus appears that agricultural laborers constitute only a small portion of the male adult emigration to the United States and Canada, being but about 2½ per cent. of the total; whereas the emigration of the same class to Australasia reaches the large figure of nearly 15 per cent. But in the case of a better class, farmers and graziers, the proportions are quite different, being 5 per cent. for the United States, 2½ per cent. for Canada, and 4½ per cent. for Australasia. But if we combine all agriculturists under one head the proportions are 7 per cent. for the United States, 5 per cent. for Canada, and 19 per cent. for Australasia. The general laborers, on the other hand, show a very great preference for North America, constituting 60 per cent. of all the adult male emigration to Canada, and 50 per cent. of that to the United States, while they contribute but 10 per cent. of such emigration to Australasia.

These figures, then, show a very marked difference between the character of the emigration to the United States and that to Australasia, in certain important particulars. By turning to the circulars of the information office it will be seen that there is a more uniform demand in Australasia for farm laborers than for other classes of emigrants, and, as these get good wages there, ranging from $200 to $375 per annum, in addition to board and lodging, it would be reasonable to suppose that they would be largely induced to emigrate by assisted or "nominated" passages. The statistics are therefore in harmony with what might be expected.

During the years when free passages or assisted passages were most easily had it would be reasonable also to expect this class to contribute in an unusual degree to the volume of emigration to the countries offering them. I have not been able to procure reliable or complete information concerning such privileges during a series of years, but a compariison of these with the fluctuations in the emigration of agriculturists would doubtless be interesting.

No inducements are held out to the general laborers and, these, as the figures show, proceed in the natural way and seek the most accessible countries.

CONCLUSION.

The information gathered under the foregoing seven titles of this report has been freely commented upon as the instructions of the Department seemed to justify or require. It will hardly have escaped notice, however, that there is a class of facts running through the whole, which point with such persistence in one direction, as to require a more serious and comprehensive consideration.

The question of the wages of laborers on the one hand, and of the amount of the necessaries and comforts of life which those wages can purchase, on the other, has long commanded the attention of economic writers, who seem by such a comparison to measure the relative advantages conferred by the laws of different nations upon the earners of wages within their respective domains. Without doubt, in the absence of a more comprehensive guide, these factors are of great value in the solution of the problem. There is no difficulty in bringing the currencies in which wages in different countries are paid to a common standard, and the efforts referred to then proceed upon the assumption that it only the cost of the articles for which the wages are expended can be ascertained, the other factor becomes determinate, and consequently the value of the wages determinable. This, however, by no means ends the difficulty, for the different conditions under which wage-earners work in different countries, difference in the number of hours of labor per week, difference in the machinery and the speeding of machinery, difference in the kind of housing, clothing, and food which supplies the greatest amount of comfort under the varying conditions of climate and other peculiarities of the places where their several lots are cast, so complicate the terms of this factor that the writers referred to are never able to write in the same language. The confusion is not less real because frequently it is not perceived that the language is not the same. On the contrary a much more perfect synonomy than is yet within reach is needed to reconcile the barbarous voices in which the laborers in widely separated countries describe what satisfies them in meat and drink, clothing and shelter, leisure and enjoyment. So it comes about that we are constantly multiplying oranges by apples, and never cease to quarrel over which kind of fruit rewards the effort.

It has been said that the ablest commissary-general who ever lived could not feed London for a day; yet the law of supply and demand, operating through the forces of individual self-interest, directed by no concert of action, but following the rut and concentrated in their final effect, delivers to the great city each day just what it needs of corn and meat and drink. By an unerring law of like kind the laborer who is able to avail himself of the opportunity to sell his labor in the market of the world, sells it where his wit, quickened by the first law of nature, tells him he can get most for it.

It seems to me that the decision of many hundreds of thousands of such people, as arrived at by considering their action through long periods of time, and by a comparison of their action in different periods of sufficient length to remove the effect of transient causes, is not only the best, but a very perfect standard by which to determine what is best for those who render the decision.

It is thus that the prices of commodities are settled throughout the world, which prices are what they are, and not what we might compute that they ought to be by reckoning the value of the elements that enter into their production, It is proposed, therefore, to recapitulate what, we have seen, the emigrant laborer has been doing with himself, and to come to the conclusion that he has come to.

We have seen, in the first place, that there is a law of emigration which regulates the flow of emigrants—not in accordance with the state of trade in the countries whence the emigration proceeds, but in accordance with the state of trade and of the labor market in the countries to which it is destined. We have seen that the volume of emigration rises and falls, in response to the changes of condition just stated, with singular regularity; and that such rise and fall is coincident in the two countries, the United Kingdom and Germany, which chiefly supply emigration to the United States.

We have seen, in the second place, that it is the unskilled laborers who supply the chief portion of emigration; that the increasing pressure of population seeks to relieve itself by throwing off those of this class who are least able, within the limit of ability, to transport themselves, to resist the intense competition which results from such pressure; and that these, obeying the law of supply and demand, strike a balance for themselves between competition at home and that which the last resort of emigration subjects them to in the countries to which they might emigrate. We have seen, in the third place, that the United States, directly and indirectly through Canada, absorb nearly all of the unskilled laborers thrown off in the process just described; and that, while all grades of laborers are admitted to the United States duty free, only, or almost only, those take advantage of this exemption who are furthest removed by want of skill from ability to work in the industries which do not enjoy a like exemption.

We have seen, in the fourth place, that as soon as facility of transit between 1840 and 1860 opened the way to relief from pressure of population, the British and the Germans, whose population rapidly increases, instantly availed themselves of the opportunity of relief thus afforded, by increasing their ratios of emigration at a bound—the British by 500 per cent., the Germans by 600 per cent.

And we have seen, in the fifth place, that notwithstanding both the pressure of population and the facility of transit for relief of such pressure enormously increased in the United Kingdom and in Germany between 1860 and 1880, the ratio of emigration to the United States to population fell off in each country during that period; but that it fell off 23 per cent. in the United Kingdom and only 6 per cent. in Germany, notwithstanding the intensity of the pressure became greater in the former country than in the latter.

In a word, it appears that the United States have not presented the same attractions to the class that lives by wages since 1860 that they did before that time, and that the wage-earner has governed himself accordingly.

In harmony with these facts we have also seen that during the past forty years the wealth of the people of the United Kingdom has vastly increased, and that, in the process, that portion of the population which lives by trades and professions has gotten the lion's share of the increase; that of this class the employed have been especially benefited, and have consequently advanced to a degree of comfort never known by them before; and that during periods ranging from ten to forty years, and in each of such periods, the wage-earners of this country have progressed in every respect by which the moral, intellectual, and material progress of a people can be gauged—in abstention from crime and immorality; in increasing thrift and decreasing pauperism; in the enjoyment of better food, housing, and clothing, and these as the result of higher wages; in better health and longer life; and, while lighter burdened by taxes than any other of the civilized nations, in gaining more leisure and securing a greater increase of the benefits of diffused education than the people of any other portion of the world; and, finally, that these changes, as a rule, have taken place in greater degree in the Manchester district—which, as the chief center of industrial development, has also to provide for the greatest increase of population —than in the rest of the Kingdom.

From all which it is to be concluded that the British workingman has not ignored the law of supply and demand, which governs all other such transactions, nor rebelled against his own interest in choosing the market for his labor. With such precision, indeed, has he seemed to adjust his movements to the fluctuations of the labor market as to suggest that he is guided by a price-current like his more learned brother in commerce. Perhaps the price-current exists, though it may not come to him in the tabulated form which serves the merchant so well.

Among Mr. Giffen's tables—which are a mine of wealth to the industrious searcher therein—is one which has been continued since 1848, showing the amount, so far as ascertained, of money remitted by settlers in the United States and Canada to their friends in this country. A comparison of these remittances during the period in which the British workingman has been showing an increasing aversion to the United States, with so much as the record admits of the period which seemed so attractive to his emigration, would appear to supply such a price current; and one which, it will be seen, singularly confirms the correctness of the ruder information that he must have acted upon.

Statement extracted from Mr. Giffen's Table VII and XII of the number of British subjects emigrating from the United Kingdom to the United States and British North America from 1853 *(before which year the nationalities were not distinguished) to* 1880; *of the total amount remitted by settlers in those two countries to their friends in the United Kingdom in each year and in certain groups of years, and of the amount per capita in each such year and group of years—calculated in sterling and in its equivalent in United States gold coin.*

Years.	Number of emigrants.	Amount remitted.		
		Total.	Per capita.	
			£. s. d.	
1853	222,731	£1,439,000	6 9 2	$31 43
1854	189,306	1,730,000	9 2 9	44 45
1855	102,349	837,000	8 10 7	41 50
1856	106,230	951,000	8 19 0	43 55
1857	122,319	593,165	4 17 0	23 59
1858	55,860	472,610	8 0 5	39 03
1859	59,565	520,019	8 14 7	42 47
1860	70,644	534,476	7 11 2	36 77
1853 to 1860	929,004	7,113,270	7 13 1	37 24
1861	42,113	374,061	8 17 7	42 20
1862	57,054	360,578	6 6 5	30 76
1863	140,193	383,286	2 14 7	13 27
1864	141,536	332,172	2 7 0	11 43
1865	132,867	481,580	3 12 5	17 62
1866	141,828	498,028	3 10 2	17 07
1867	138,211	543,029	3 18 5	19 08
1868	120,822	530,564	4 7 10	21 36
1869	167,658	639,335	3 16 2	18 53
1870	180,634	727,408	4 0 7	19 60
1861 to 1870	1,262,936	4,870,041	3 17 0	18 73

Statement extracted from Mr. Giffen's Table VII and XII of the number of British subjects emigrating from the United Kingdom to the United States, &c.—Continued.

Years.	Number of emigrants.	Amount remitted.		
		Total.	Per capita.	
			£. s. d.	
1871	175,742	£702,488	4 8 0	$21 40
1872	186,104	749,664	4 0 7	19 60
1873	195,775	724,040	3 13 9	17 94
1874	134,502	485,566	3 12 2	17 56
1875	93,490	354,356	3 15 9	18 43
1876	63,880	449,641	7 0 10	34 26
1877	53,201	667,564	12 11 0	61 06
1878	65,346	784,067	11 19 10	58 34
1879	109,758	855,631	7 16 0	37 93
1880	187,472	1,403,341	7 9 9	36 43
1871 to 1880	1,265,348	7,176,358	5 13 5	27 59
1861 to 1880	2,528,284	12,046,390	4 15 3	24 17

It thus appears that from 1853, the first year of recorded nationalities, to 1860, inclusive, 929,004 emigrants to the United States and British North America sent back savings amounting to £7,113,270, or $37.24 per capita, and that from 1861 to 1880, inclusive, 2,528,284 emigrants sent back savings amounting to £12,046,399, or $24.17 per capita. An examination of the table more in detail would tend to heighten the contrast, especially when the difference in the value of money between the two periods is considered, and the further fact that whatever incompleteness exists in the records would be constantly diminishing as we approach the present time.

Taking all these things into consideration, the conclusion would seem to be irresistible that, while this country has been making such extraordinary progress in wealth and all that brings contentment in life, my own country has been standing still or retrograding. But upon turning to the statistics of the United States I find, on the contrary, that our wealth as a nation has enormously increased during the very period in which the British workingman has been showing his strange aversion to us.

Perhaps, however, the increase of wealth has not been undergoing diffusion, as here in the United Kingdom, and that it has gone into other hands than the like of his. His conduct and Mr. Giffen's tables would indicate that such is the fact.

As already remarked, such information has been collected in this report and such comments made upon it as the Department's instructions seemed to justify or require. I do not understand that I am called upon to attempt an explanation of the causes which have brought about a state of affairs so humiliating to our pride as that in this so-called aristocratic country wealth is measurably passing from the few to the many, while in our own country, during the last quarter of a century, a movement of quite a contrary kind seems to have been occurring. That, I assume, will be the care of those who give attention to economic questions with a view to affecting legislation, and who, following the spirit of our institutions, concern themselves chiefly in behalf of the laboring man.

E. J. HALE,
Consul.

CONSULATE OF THE UNITED STATES,
Manchester, England, December, 1886.

NOTE.—It may be observed that in the note at the foot of Table VII*a*, page — of this report, Mr. Giffen calls attention to the necessary incompleteness of these records. In a former report he also called attention to certain deficiencies that would render a conclusion drawn from a comparison between particular years misleading, as, for example, a certain amount which should have appeared in a given year was not returned until the next, &c.; but error from this source is avoided by the aggregation of numbers of years, and the measure of incompleteness, as already explained, cannot be variable except in an increasing tendency to greater fullness as the present time is approached. It may also be added that it would appear from this table that the emigrants have sent back something more than the amount which Mr. Wilson, of the Inman line, informs me they carry away, viz, £5 (about $25) on an average.

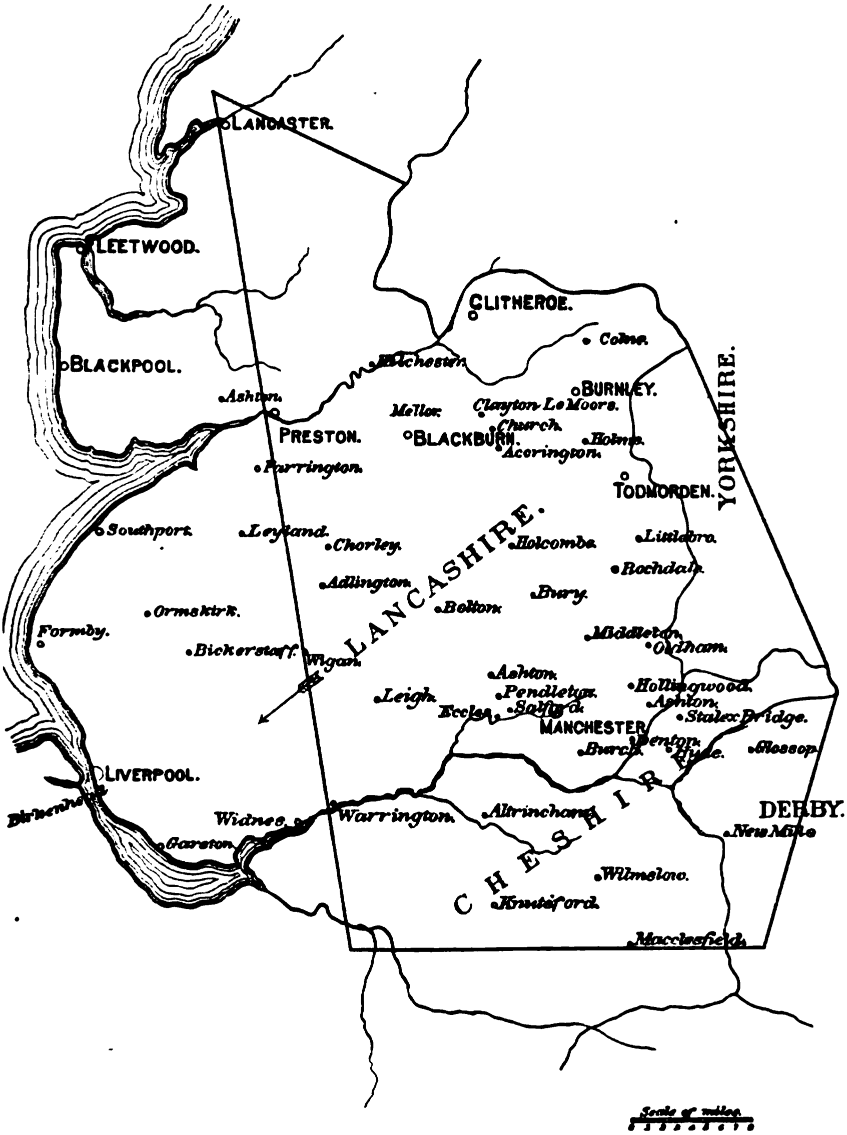
EXPLANATION OF MAP OF CONSULAR DISTRICT OF MANCHESTER.

Upon an English ordnance map circles were described about Manchester and the neighboring seats of United States consuls in radii of multiples of 4 miles. Where the lines of circles of equal radii met between Manchester and the other consulates the boundary line of this district was set there. The result was a map that conformed to the law defining the "place of shipment," and was almost conterminous with this consular district as it has existed in years of practice. The map now inclosed was constructed from the map just described by adding a little of the cotton portion of Yorkshire and yielding a little of the wool portion of Bradford, as in trade and practice would be required.

Again, Warrington is just within the Manchester boundary, but its population has not been included in the estimate of population for this, district, because Liverpool has long been the market town of Warrington, and there Warrington's invoices are certified.

NOTE ON THE LAW OF DIVORCE.

Previous to the year 1857 all matrimonial suits came before the ecclesiastical courts. But a divorce could only be obtained by means of a private act of Parliament, the expense and trouble of obtaining which made divorce a luxury of the opulent. By the act 20 and 21 Vict., c. 85, there was established a civil court, entitled the court of divorce and matrimonial causes, since absorbed into the probate, divorce, and admiralty division of the high court of justice. The act provides that a petition for dissolution of marriage may be lawfully presented to this court by the husband on the ground that his wife has been guilty of adultery; by the wife on the ground that her husband has been guilty of incestuous adultery, bigamy with adultery, rape, unnatural crime, or of adultery coupled either with such cruelty as would by itself entitle her to a judicial separation, or with desertion for two years or upwards. If the husband be petitioner, he must, unless specially excused by the court from so doing, make the alleged adulterer a co-respondent. The petitioner, whether husband or wife, must prove that there has been no collusion on his or her part. The husband may, in a petition for dissolution of marriage, claim damages from the adulterer, and the court has power to direct in what manner the damages given should be applied. It may also order the adulterer to pay the costs of the proceedings, in whole or in part. The court may order the husband to provide for the wife, by securing to her either a gross sum or an annual allowance or monthly or weekly payments, and may make his doing so a condition of its decree. It may also make such orders with respect to the custody of the children of the dissolved marriage, and with reference to any property secured by settlements made before or after such marriage, as it may think proper. A decree for a divorce is always in the first instance a decree *nisi*, and cannot be made absolute until three months have elapsed from the time of pronouncing it. During this period any person is at liberty, in the proper manner, to show cause why it should not be made absolute, or to give information to the Queen's proctor of any fact material to the case. The Queen's proctor thus informed, and having reason to suspect that the parties to the suit have been acting in collusion, may, under the direction of the attorney-general and by leave of the court, intervene in the suit. The parties, or either of them, may insist on having the contested matters of fact tried by a jury. The damages to be obtained by a husband must always be assessed by a jury.



MANCHESTER CONSULAR DISTRICT.

TUNSTALL.

REPORT OF CONSUL SCHOENHOF.

Emigration from the United Kingdom finds its high tide usually in the years of greatest business activity in the United States, and conversely its lowest ebb in years of business stagnation ruling in the States. Likewise is the back-current influenced, moderated, or intensified by the same causes, and the flow of immigrants to the mother country is heaviest in years of depression, when trade and manufacture is equally stagnant in Great Britain as well as in other countries the world over. This is evident from the following tables, covering sixteen years for emigration and ten years for immigration, the period for which separate lists of immigrants of British and Irish origin were kept.

A—*Balance of emigration of persons of British and Irish origin only, deducting recorded immigration from recorded emigration of such persons.*

[From the board of trade returns.]

Years.	Emigration.	Immigration.	Net emigration.	
			Numbers.	Population total population of United Kingdom.
				Per cent.
1870	202,511	....	....	0.65
1871	192,751	....	....	0.61
1872	210,494	....	....	0.66
1873	228,345	....	....	0.71
1874	197,272	....	....	0.61
1875	140,675	....	....	0.43
1876	*108,469	71,404	38,065	0.11
1877	*95,195	63,890	31,305	0.09
1878	*112,902	54,944	57,958	0.17
1879	†164,274	37,936	126,338	0.37
1880	†227,542	47,007	180,555	0.52
1881	†243,002	52,707	190,295	0.54
1882	†279,366	54,711	224,655	0.64
1883	†320,118	73,804	246,314	0.69
1884	*242,179	91,356	150,823	0.42
1885	*207,644	85,468	122,176	0.34

* Business decline. † Business activity.

That this centripetal and centrifugal force is mainly exercised by the United States is shown by the Tables B and C below. B giving the countries to which emigration was directed and C the countries from which immigrants returned during the same period of years to the mother country.

B.—*Number and percentage of persons of British and Irish origin only, who left the United Kingdom for the United States, British North America, Australasia, and all other places, in each year from* 1870 *to* 1885, *inclusive.*

Years.	United States.		British North America.		Australasia.		All other places.		Total.
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	
1870*	153, 466	76	24, 168	13	16, 526	8	5, 351	3	202, 511
1871*	150, 788	78	24, 954	13	11, 695	6	5, 314	3	192, 751
1872*	161, 782	77	24, 382	12	15, 248	7	9, 082	4	210, 494
1873*	166, 730	73	29, 045	13	25, 137	11	7, 433	3	228, 345
1874*	113, 774	58	20, 728	10	52, 581	27	10, 180	5	197, 272
1875†	81, 193	58	12, 306	9	34, 750	24	12, 426	9	140, 675
1876†	54, 554	50	9, 335	9	32, 196	29	13, 384	12	109, 469
1877†	45, 481	48	7, 720	8	30, 138	32	11, 856	12	95, 195
1878†	54, 694	49	10, 652	9	36, 479	32	11, 077	10	112, 902
1879*	91, 806	56	17, 952	11	40, 959	25	13, 557	8	164, 274
1880*	166, 570	73	20, 902	9	24, 184	11	15, 886	7	227, 542
1881*	176, 104	73	23, 012	10	22, 682	9	20, 304	8	243, 002
1882*	181, 903	65	40, 441	15	37, 289	13	19, 733	7	279, 366
1883*	191, 573	60	44, 185	14	71, 264	22	13, 096	4	320, 118
1884†	155, 280	64	31, 134	13	44, 255	18	11, 510	5	242, 179
1885†	137, 687	66	19, 838	10	39, 395	19	10, 724	8	207, 644

* Business activity. † Business decline.

C.—*Number of British and Irish immigrants from various countries landed in the United Kingdom in each year since* 1876, *the first year in which the nationality of the immigrants was recorded.*

Year.	From United States.	From British North America.	From Australasia.	From all other places.	Total.
1876	54, 697	6, 629	2, 579	7, 499	71, 404
1877	44, 878	5, 687	4, 637	8, 688	63, 890
1878	34, 040	6, 004	4, 207	10, 493	54, 944
1879	20, 048	3, 497	4, 967	9, 424	37, 936
1880	26, 518	4, 688	5, 910	9, 891	47, 007
1881	29, 781	5, 761	5, 877	11, 288	52, 707
1882	28, 468	6, 097	6, 871	13, 275	54, 711
1883	46, 703	7, 021	6, 844	13, 236	73, 804
1884	61, 466	8, 861	8, 312	12, 717	91, 356
1885	57, 604	9, 321	7, 946	10, 507	85, 408

Years of business activity in the United States, being the greatest percentage of emigrants to that country and the smallest number to Australasia, while in years of stagnation the reverse is noticeable. We observe the same fact in the emigration statistics of the anterior decade, from 1861 to 1870.

D.—*Number and percentage of British and Irish origin only who left the United Kingdom for the United States and Australia in each year from* 1861 *to* 1885.

Year.	United States.		Australasia.		Total.
	Number.	Per cent.	Number.	Per cent.	
1861*	38,160	58	20,597	32	65,197
1862*	48,720	50	38,828	40	97,763
1863*	130,528	68	50,157	26	192,864
1864*	130,165	70	40,073	21	187,081
1865*	118,463	68	36,683	21	174,891
1866*	131,840	77	23,682	14	170,053
1867†	126,051	80	14,023	9	156,982
1868†	108,490	78	12,332	9	138,187
1869†	146,737	79	14,457	8	189,300
1870†	153,466	76	16,526	8	202,511
1871†	150,788	78	11,695	6	192,751
1872†	161,782	77	15,248	7	210,494
1873†	166,730	73	25,137	11	228,345
1874†	113,774	58	52,581	27	197,272
1875*	81,193	58	34,750	24	140,675
1876*	54,554	50	32,196	20	109,469
1877*	45,481	48	30,138	32	95,195
1878*	54,694	49	36,479	32	112,902
1879†	91,806	56	40,959	25	164,274
1880†	166,570	73	24,184	11	227,542
1881†	176,104	73	22,682	9	243,002
1882†	181,903	65	37,289	13	279,866
1883†	191,573	60	71,264	22	320,118
1884*	155,280	64	44,255	18	242,179
1885*	137,687	66	39,395	19	207,644

* Business decline. † Business activity.

Emigration to British North America seems to run parallel with that to the United States, as in fact many emigrants take the way to the States via Canada, or change their residence from time to time after having found a first place of residence there. Furthermore, business aspects in both countries are usually subject to the same fluctuating periodicity. The relative respective attractive force as from centers of emigration is therefore best illustrated in the emigration statistics of Australasia and America. In the years of war, from 1861 to 1865, of a total of 717,796 to all countries, America absorbed 466,042, or 65 per cent.; Australasia absorbed 186,338, or 26 per cent. In the eight succeeding years of active trade in the United States, from 1866 to 1873, in a total of 1,485,623, America absorbed 1,145,884, or 77 per cent., while Australasia absorbed 133,100, or 9 per cent. A yearly average of 37,267 from 1861 to 1865, against an average of 16,637, in the years of activity, 1866 to 1873, in the United States, looked for homes at the antipodes. That not extraneous causes, like gold fever, &c., influence this changing attractiveness of Australasia, but the business aspects of the United States, will be seen from the following transcript of succeeding business periods.

In the five years of declining and depressed trade in the United States, from 1874 to 1878, inclusive, in a total of 655,513 to all countries, America absorbed 349,696, or 53 per cent., and the tide to Australasia rose again to 186,144, or 28 per cent., a yearly average of 37,228.

In the three years of activity in the United States, from 1880 to 1882, inclusive, in a total of 749,910 to all countries America absorbed 524,577 or 70 per cent., while Australasia absorbed 84,155 or 11 per cent.; a yearly average for Australasia of 28,052.

During the last three years of depression in America, emigration to Australasia has been the heaviest yet recorded, to wit, 769,941, of which America absorbed 484,540, or 63 per cent., and Australasia 154,914, or 20 per cent., an average of 51,638 for each year from 1883 to 1885, inclusive.

OCCUPATION OF EMIGRANTS.

Full lists of emigration statistics published by the board of trade have been forwarded to the Department. I will only call attention to such general details which will illustrate from a general point of view what I have taken as a basis of inquiry in my immediate district, that of North Staffordshire, to wit, the small number of skilled artisans of British and Irish origin leaving the United Kingdom for foreign countries:

A.—*Occupations of adult passengers leaving the United Kingdom in* 1885.

Occupation.	United States.	British North America.	Australasia.	All other places.	Total.
MALES.					
Agriculture:					
Laborers, gardeners, &c	5,450	351	3,258	28	9,087
Farmers and graziers	3,518	285	1,219	201	5,223
Total	8,968	636	4,477	229	14,300
Trades and professions:					
Gentlemen, professional men, merchants, &c	3,736	1,998	1,649	2,058	9,441
Army and navy	4	15	28	327	374
Clerks and agents	1,430	54	1,122	237	2,843
Domestic servants	305	12	132	46	495
Shopkeepers, &c	480	25	602	158	1,265
Seamen	186	41	93	10	330
Laborers, general	25,506	4,144	3,017	140	32,807
Total	31,653	6,289	6,643	2,976	47,561
Mechanics, &c.:					
Bakers	94	2	324	10	430
Blacksmiths	79	5	158	8	250
Boot and shoe makers	80	3	102	34	279
Braziers, &c	17	....	48	3	68
Brick-makers, potters	16	....	29	....	45
Brick-layers, &c	671	17	390	20	1,098
Builders	34	....	83	2	119
Butchers, &c	111	1	82	4	198
Cabinet-makers	40	....	70	....	110
Carpenters	526	56	740	52	1,374
Clock-makers, &c	48	....	27	16	91
Coach-makers, &c	6	....	33	....	39
Coopers	8	....	12	....	20
Engineers	228	9	388	191	816
Founders, &c	52	....	62	2	116
Mechanics	3,731	123	528	91	4,473
Millers, &c	40	2	37	3	82
Miners	2,257	1	860	207	3,325
Painters	314	2	285	1	602
Printers	58	2	65	14	139
Saddlers	18	1	21	4	44
Sawyers	15	....	19	....	34
Shipwrights	10	....	18	....	28
Smiths	97	1	29	5	132
Spinners, &c	198	2	30	1	231
Tailors	123	4	137	54	318
Tanners, &c	15	....	12	1	28
Turners	21	....	12	....	33
Wheelwrights	12	....	38	....	50
Other trades	622	6	466	205	1,299
Total	9,541	237	5,165	928	15,871
Occupations not stated	17,303	3,454	3,841	1,881	26,479
FEMALES.					
Domestic servants	14,915	550	3,920	208	19,593
Gentlewomen, &c	52	2	53	38	145
Milliners, &c	357	3	136	41	537
Shopwomen	23	....	15	7	45
Spinners, &c	78	1	13	....	92
Other trades	83	6	98	78	265
Not stated	33,246	4,799	7,853	2,937	48,835
Grand total	116,219	15,977	32,214	9,323	173,733

Taking a year of general comparative prosperity, 1881, and highest emigration rate, we find no material difference in the relative grading of occupations of emigrants.

B.—*Occupations and general destination of adult passengers in* 1881.

Occupations.	United States.	British North America.	Australasia.	All other places.	Total.
MALES.					
Agriculture:					
Laborers, gardeners, &c	330	169	2,160	18	2,673
Farmers, graziers, &c	3,166	274	431	283	4,174
Total	3,522	443	2,581	301	6,847
Trades and professions:					
Gentlemen, professional men, merchants, &c	6,415	1,284	1,132	2,817	11,648
Army and navy	26	91	15	497	629
Clerks, agents, &c	847	50	342	231	1,470
Domestic servants	119	19	23	45	206
Shopkeepers, &c	360	17	279	656	1,312
Seamen	105	38	34	13	190
Laborers, general	50,164	8,115	827	717	59,823
Total	58,036	9,614	2,652	4,976	75,278
Mechanics, &c.:					
Bakers	96	2	38	11	147
Blacksmiths	78	7	48	23	156
Boot and shoe makers	94	3	51	10	158
Braziers, &c	37	....	9	....	46
Brick-makers, potters	33	....	18	1	52
Bricklayers, &c	761	16	153	187	1,117
Builders	31	....	18	14	63
Butchers	103	....	35	9	147
Cabinet-makers	37	4	23	4	68
Carpenters	1,372	31	273	116	1,792
Clock-makers	26	....	17	11	54
Coach-makers	7	....	8	2	17
Coopers	31	....	12	1	44
Engineers	349	6	126	175	656
Locksmiths	8	....	2	....	10
Mechanics	4,872	271	141	1,036	6,320
Millers	22	....	17	2	41
Miners	12	....	5	....	17
Painters	199	5	50	10	264
Printers	53	....	27	9	89
Saddlers	22	2	14	6	44
Sawyers	21	1	10	....	32
Shipwrights	128	8	5	6	147
Smiths	189	....	11	33	233
Spinners, &c	472	6	21	2	501
Tailors	179	3	46	49	277
Tanners	8	....	7	....	15
Turners	16	....	5	2	23
Wheelwrights	14	....	19	2	35
Other trades	2,220	730	429	230	3,609
Total	11,490	1,095	1,638	1,951	16,174
Occupations not stated	9,682	2,060	4,242	4,512	20,496
FEMALES.					
Domestic servants	14,901	1,200	2,167	244	18,512
Gentlewomen, &c	37	27	20	50	143
Milliners, &c	153	6	73	3	235
Shopwomen	2	....	5	....	7
Other trades	362	17	50	9	438
Not stated	42,240	4,569	4,925	5,091	56,825
Grand total	57,695	5,819	7,249	5,397	76,160

Not to weary with too lengthy a repetition of the same kind of statistical tables, I bring a summary for the last ten years of classified occupations, as in Tables A and B of Part II:

C.—*Occupations of adult passengers leaving the United Kingdom during the last ten years, from* 1876 *to* 1885, *inclusive.*

Occupations.	United States.	British North America.	Australasia.	All other countries.	Total.
MALES.					
Agriculture:	*No.*	*No.*	*No.*	*No.*	*No.*
Laborers, gardeners, &c	15,534	3,143	38,967	183	55,827
Farmers, graziers, &c	32,242	3,629	9,660	2,106	47,637
Total	45,776	6,772	48,627	2,289	103,464
Trades and professions:					
Gentlemen, professional men, merchants, &c	53,676	19,988	14,878	24,744	113,286
Army and navy	248	644	335	3,681 580	5,490
Clerks and agents	8,082	390	5,921	3,656	18,049
Domestic servants	1,283	193	617	429	2,522
Shop-keepers, &c	3,001	150	4,520	2,357	10,028
Seamen	1,250	186	477	175	2,088
Laborers, general	301,640	71,201	26,126	4,957	403,924
Total	369,180	92,754	52,874	40,579	555,387
Mechanics, &c:					
Blacksmiths, &c	655	78	1,374	111	2,218
Bakers, &c	914	41	1,297	53	2,305
Boot and shoe makers	753	31	1,218	130	2,132
Braziers, &c	218	8	493	12	731
Brick-makers and potters	219	6	332	7	564
Brick-layers, &c	6,236	313	4,402	1,348	12,299
Builders	259	25	446	67	797
Butchers	1,088	38	993	48	2,167
Cabinet-makers	236	22	602	20	880
Carpenters	9,833	500	7,745	635	18,763
Clock-makers, &c	208	5	285	57	555
Coach-makers, &c	70	5	260	23	358
Coopers	337	8	215	10	570
Engineers	351 2,170	26 97	779 2,211	327 1.720	7,681
Founders	52	....	62	2	116
Mechanics	38,694	6,428	3,120	4,484	52,726
Locksmiths	49	....	46	4	99
Millers	220	23	318	22	582
Millwrights	37	3	64	4	108
Miners	23,030	107	4,891	1,807	29,925
Painters	1,880	88	2,636	79	4,683
Printers	477	30	563	73	1,143
Saddlers, &c	125	8	325	20	478
Sawyers	73	5	262	9	349
Shipwrights, &c	178	27	162	29	396
Smiths	1,569	26	378	139	2,112
Spinners, &c	2,437	60	250	21	2,768
Tailors	1,535	56	1,104	236	2,951
Tanners, &c	115	6	157	3	281
Turners	156	4	181	8	349
Wheelwrights	86	4	367	17	474
Other trades	11,654	2,067	8,245	3,696	25,662
Total	105,934	10,144	45,783	15,361	177,222
Occupations not stated	102,447	12,103	37,955	25,236	177,741
FEMALES.					
Domestic servants, &c	107,598	9,140	40,559	3,671	159,968
Gentlewomen, &c	988	550	616	631	2,815
Milliners, &c	2,431	49	1,214	111	3,835
Shopwomen	52	....	102	17	171
Other trades, &c	2,015	70	945	229	3,259
Not stated	304,969	47,074	68,907	33,651	454,601
Total	418,053	56,883	112,373	37,340	624,649

Though it must be admitted that a percentage of skilled artisans may be contained in "occupations not stated," yet it is presumable that those withholding their occupations are those belonging to that class of passengers who are classified as "cabin passengers," and among whom the artisan classes, as a rule, find no perceptible representation. In 1885 there were 51,428 cabin passengers. In 1881 there were 54,270 cabin passengers, and in the ten years, 1876–'85, there were 492,557, which, deducting gentlemen, professional men, merchants, shop-keepers, and clerks already enumerated, would pretty fairly absorb all "occupations not stated," so that the classification of artisans and mechanics would not be very materially altered by the residuum remaining over from a closer scrutiny of "occupation not stated." It is apparent from this that the manufacturing branches of the industries of the United States do not receive a very heavy contingent from the skilled labor of Great Britain.

It would be premature to enter into generalizations on this subject. It may be said, however, that the English workingman is a stay-at-home body. He loves his surroundings, habits, customs, family ties, and the charm of the many festive occasions, which weave a garland of flowers into his frugal and toilsome existence, makes him prefer the spot where he has been born and reared to many a land of promise from which he sees others not unfrequently return after a trial, glad to be back again among the old associates of their youth. Sentiment may have a great share in this phenomenon. But sentiment is one of the most powerful motors of human actions, wielding no small influence upon social dynamics, and is certainly able to explain many of the intricacies of the emigration problem.

WAGES.

Day wages, measured by the standard of the United States, are smaller in comparison measured by that of other countries relatively high. Considering, however, the more evenly distributed work and earnings, coupled with the low cost of commodities and living expenses, a frugal, sober workman, assisted by a wife of like inclination, can eke out a fairly satisfactory existence. Statistics of wages exist to a large extent, but seldom have they been stated by workingmen themselves. For the first time to my knowledge has a very extensive list been published in answers from secretaries of trade societies in the United Kingdom to questions formulated and sent out by the royal commission on trade depression. These answers have been published lately by this commission in appendix to Part II of their report. I give a tabulated list of the most important ones. There being several hundred, and many being repetitions in the same trade, it would uselessly fill space and time to reproduce them all:

Wages and working-time of British artisans from answers from associations representing the interests of the working classes.

Place and name of trade society.	Wages paid per hour.	Equal to week.	Hours worked.	Weekly wages.	Twenty years ago.	Years of apprenticeship.	Remarks.
	Cents.						
Amalgamated Society of Engineers, Belfast.			54	$6 81–8 75		5–7	
Bicycle makers, Coventry:							
Skilled	18–24	$9 85–13 14	54			7	In busy months from 60 to 80 hours.
Unskilled	6–12	3 16– 6 56					
Females	4	2 19					
Machine, making, Dundee.			54	6 08			Unskilled, $3.65.
Engineering trade:							
Glasgow			54	6 32			
Hartlepool	14	7 66	54			3–5	Inclusive overtime 63 hours.
London	18	9 85	54			7	
Nottingham				8 27		5–7	Great activity in lace trade reported.
Oldham			54	8 02		5–7	
Ulverstone			54	7 54	$6 32		57½ hours in 1865.
Wednesbury			54	7 29	6 81	6–7	
Boiler-makers:							
Hull	13½	7 38	54				
Liverpool			54	6 81–8 27			Unskilled, $4.86 to $5.83.
Stockton on Lees			54	8 27			Average.
Iron-founders:							
Accrington			54	7 78–8 78		7	
Barnsley	15	8 20	54			7	Apprentice wages commence at 97 cents and rise yearly 24 cents per week.
Birkenhead			54	8 27			
Chester	15	8 20	54			7	
Iron-molding:							
Ipswich	12½	6 83	54				
London			54	9 24		7	
Swansea	13½	7 38	54	7 29	5 10		19 foundries work 54 and 4 foundries work 60 hours.
Wolverton	12½	6 83	54				
Dundee			54	7 15–7 20		7	Some work 59 hours at $5.83 to $6.32.
Shipwrights:							
Glasgow	13½	7 38	54		8 75	5	60 hours in 1865.
Bristol	11	6 01	54			7	
Blacksmiths:							
Ardrossan				5 35–6 56			
Edinburgh	12	6 56	54	3 65–8 02		5	
Leeds	12	6 56	54			7	
Nottingham	12	6 56	54			4–5	
Coach-builders:							60 hours in 1865; trimmers, $4.86 to $7.15; painters, $4.86 to $7 15; body-makers, $6.32 to 7.15; carriage-makers, $5.59 to $6.57; wheel-makers, $4.86 to $7.15; smiths, $5 83 to $7.54.
Cheltenham			54	7 29		6–7	
Dublin			58	6 32		7	
Dundee			57	4 86–7 54			
Taunton				4 86–7 29			
Railroad-coach builders, Wolverton.			54	5 83–7 78		7	
Pattern-makers, Glasgow.		5 35–7 29	54			5	
Tin-plate makers, Wolverhampton.			51–54	7 29–10 22		7	Majority piece-work.
Brick-layers:							
Bournemouth	13	7 13					
Camberwell	18	9 85					
Cheltenham	14	7 94	56		5 83		60 hours in 1865: ascribe poor building to land-laws, leasehold, &c.
Kidderminster	13½	7 73	56½				
Liverpool	16	8 75					
Stonemasons:							
Blackpool			49½	8 02			$1.46 per day of 9 hours.
Chesterfield	15						
London	16–18						
Newcastle-on-Tyne	16	8 10	50		6 56		56 hour in 1865.

Wages and working-time of British artisans, &c.—Continued.

Place and name of trade society.	Wages paid per hour.	Equal to week.	Hours worked.	Weekly wages.	Twenty years ago.	Years of apprenticeship.	Remarks.
Carpenters, &c.:	*Cents.*						
Armagh			60	$6 81			
Buxton	13 14 14½	$6 50 7 02 7 27	49½			5–6	
Chester	15	8 20					
Dundee	14	7 23	51				
Rugby	14	8 01	56½		$5 47		
Manchester	16	8 83	54½				From November to February, only 47 hours.
Decorative painters, Swansea.	13½	7 38	54½				
Plumbers, Liverpool	16	8 91	55				From November to March, 47 hours.
Gilders, London	16–17	$9 16–9 73	56½			7	
Cotton-spinners, Oldham.				3 89 $1 82–2 81			Creelers, piecers.
Boot and shoe makers, Aberdare.				3 65–7 29			
Letter-press printing:							
Dublin	14	8 02	56½				Piecework 13 to 17 cts. per 1,000; piecework, 13½ to 21½ cents per 1,000 composition; 6 cents per hour for extra work.
Leeds			54	6 81–7 78			
London			54	8 75			
Salisbury			56–55	5 10–7 29		7	
Aylesbury	12	6 56					
Middleboro'				7 29	4 86		
Southport			51	8 27	6 81		16 cents per 1,000 nonpariel.
Bookbinding, London			54	7 78	7 29	7	60 hours in 1865.
Mining, Tipton	*81–89				$1 09–1 22		Per day.
Bakers, Glasgow					4 86–5 35		
Dressmakers, &c., London.				1 46–4 38	1 46–2 92		

* Per day.

The wages marked down in the first column are paid by the hour; those in the fourth column by the week. The proportion of hour pay is very large; in fact, the by far greatest proportion of the two to three hundred trade societies reporting to the commission are paid by the hour. In most other trades, wherever practicable, piecework is the rule. So far as compensation is concerned, the eight-hour question cannot well be raised, and the demand for goods, more than any other considoreration, regulates the working time, which, however, seldom exceeds fifty-four hours for the full week. Taking the year through, however, many deductions come off from this time, and I doubt whether the average for the year round, taking full and dull weeks and play weeks, reaches eight hours for each of the three hundred working days of the year. The often-raised question whether ten hours' work, or rather the work of a nation, can be done in eight hours' time, has therefore found its practical solution in the effective work of Great Britain. Many of the vexed questions which agitate our body politic now, working time, pay, and the mode of payment, &c., have by mutual concession become settled matters here, and so far as I can learn things work pretty smoothly, probably up to the time of a new revival, when undoubtedly new demands will be raised; but, judging from the past, it is not likely that they will be resisted if a new wave of prosperity should bring higher prices. I have, even now, in this time of depression, found many regulations in force engrafted by trade societies, which would probably be resented elsewhere as an undue interference, namely, in the glass trade, which deserves mention here. The blowers work in shifts of six hours; one man, however, is not allowed to do more than eight shifts a week and has a certain amount of work allotted to him for his shift, and if he finishes this in a shorter time he cannot take up new work but has to wait until his turn comes round again. All such regulations are enforced by the trade unions and have, so far as I can learn, worked without much jar for years without having disrupted the relative industries, or caused capital to remove its chattels to Utopia, where dividends and profits are guaranteed against the disturbing influences of agitation and varying trade aspects.

CONDITIONS IN THE POTTERIES.

The trade of this district—North Staffordshire—is principally pottery, and the conditions, so far as illustrated by working time and wages, have been fully set down in my report on pottery, printed in No. 63 of consular reports. I have since collected some additional details which explain more fully the general conditions of time and earnings. I give here the estimate of a manufacturer of varied and long experience concerning the annual wages of a hollow-ware presser in a year of trade depression, when not fully employed, and use his own words, fully illustrating the meaning of what has been said above:

> A fair average hollow-ware presser's earnings might be placed at $7.78 (see page 75 of No. 63 of consular reports) for a week of six days, but taking the present time it would be found that the four middle days of the week would fairly represent the time during which he would be employed, so that this $7.78 would from this reason be reduced to, say $5.83. This is higher than four days at $1.30 a day, the daily average of $7.78 per week, but arises from the fact that the two remaining days, that is Saturday and Monday, are scarcely ever full working days. Out of this time we must also take three weeks as representing holidays and loss of time from occasional breakdowns, &c., and then the sum would stand as follows: $5.83 × 49 =$285.47 per annum, or $5.49 per week.
>
> Now supposing that this should represent the earnings of a family consisting of father, mother, and three children, and dependent only on the earnings of the head of the house, then the income would be expended in the following manner:

Item.	Cost.	Item.	Cost.
Rent	$0 85	Coffee and sugar	$0 16
Taxes	16	Beef, 4 pounds, at 16 cents	64
Fuel	32	Butter, 1 pound	30
Oil and candles	8	Bacon	12
Soap	12	Cheese	12
Sick club	18	Milk, 7 pints	21
School fees	16	Pudding for Sunday	12
Trifles	8	Clothing and bedding	49
Medical attendance	6	Shoes	18
Newspapers, &c	24	Vegetables	12
Bread	49		
Tea	12	Total	*5 32

* Which leaves a balance of 17 cents.

Here, however, no allowance is made for the wife's income, who frequently finds employment for part of her time at least in one of the works, either as helper to her husband or in one of the decorative departments.

But I will add the remaining part of the information from which the above is taken:

> If any exception must be taken to this table I should say it would be that on the average the allowance for the various items is rather too liberal, inasmuch as present

prices are taken, and these are unprecedentedly low; so in that case, if a little was taken from some of the charges the balance would be greater, and this would be to some extent obligatory, as present earnings would be below the given average. It would therefore follow that increased prices, which would accompany a brisker trade, would be met by a higher average amount of employment. A family of this kind would be looked upon as a respectable one. You will see that in this table no allowance is made for either beer or tobacco, and the wife is supposed to be adding nothing to the family income, but wholly occupied with domestic duties. This is what we should invariably find in such a family. It is further evident that this standard of living is only maintained by the most unrelaxing and systematic economy.

Should beer and tobacco be added to these expenses it would be done mainly by sacrificing to a large extent the expenses set down for clothing, milk, pudding, and a little more would have to be pinched from the items, beef, bacon, cheese. As the family grew up and the children began to work this income would be increased by different amounts, as time went on, varying from $1.22 to $3.65 per week. But they would not be able to appropriate the whole of this increase to purposes outside this table of expenses, as the children would cost more both to feed and to clothe. Still, with a family of this description, it is most probable that saving would now begin. This would as a rule take the form of, at first, one share of $2.43 per month in a building society, which in this neighborhood is decidedly the most popular form of investment among the thrifty working classes, and as this increased income advanced from the $1.22 level to the $3.65 level another share might be taken up, thus opening a little prospect in old age.

Taking, however, a firm finding full employment as a rule for its work people, the average would be considerably higher, as may be seen from the information I have received on this item from one of the leading houses in Burslem:

I have gone through our wage-book this morning, and find that our sixteen hollow-ware pressers average per week, from January 4 to Saturday last (the 17th of July), $6.88 per man per week. I also find they only commenced full work on the 3d of April, but that during the last six weeks a little overtime has been made.

In answer to a request to state to me the actual payment made to these sixteen hollow-ware pressers in wages for one week of full employment, within the period above named, I received the following reply:

I find that the largest weekly payment to our sixteen pressers averaged $8.65 each man, while individual men have earned as much as $10.95.

This instance would alone show the impossibility of estimating the cost of production by the weekly wages earned. Here we have in one district, in the same industry and the same occupation even, the averages of weekly earnings varying from $5.35 to $8.65, while the individual differences would be greater yet. The labor price paid by the piece, however, is for like work in the different factories the same.

ENGLISH AND AMERICAN CONDITIONS.

The low cost of living possible now under the rule of lowest prices of commodities ruling since a considerable time backward, coupled with fair employment the year round, makes life comparatively easy to the artisan classes, and they do not find cause for emigration unless opportunities of extraordinary attraction are offered by foreign countries. The small number of potters quoted in the report leaving the United Kingdom for the United States and foreign countries speaks for itself. My personal inquiries among the people and authorities have not given me an intimation that any greater number are leaving than represented in the figures quoted. One meets with the remark, "Oh, yes; a good many young fellows want to see the world, and are led over by expectations and promises of high wages. But they always want to come back when trade is slack in the States." "There are too many breakdowns." "Work is not so steady," &c. One who has been for several years a hollow-ware presser at East Liverpool, Ohio, and now returned to his native place, gives the following as his comparative earnings, both here and in America, and the mode of spending his income:

Earnings of a hollow-ware presser in East Liverpool, taking his average working at about forty-five weeks, deducting seven weeks for the inclemency and severity of the winter months, also the general stagnation of the potting industry throughout the Eastern and Western States periodically, $12.50 per week being good wages for a steady and competent presser; 45 weeks=$562.50.

Earnings of a hollow-ware presser in the potteries in Staffordshire, working about forty-eight weeks in the year, getting on an average $7.29 per week; 48 weeks=$349.92.

Taking a man and wife with three children making a family of five persons.

East Liverpool.		Staffordshire.	
Items.	Cost.	Items.	Cost.
Bread, per day	$0 16	Bread, 4-pound loaf per day	$0 08
Milk, per day, 1 quart	06	Milk, 1 pint per day	03
Meat, per day, 2 pounds, at 12 cents	24	Meat, 1 pound (English)	20
Per week	3 22	Per week	2 17
Sugar, 4 pounds, at 8 cents	32	Sugar, 4 pounds, at 5 cents	20
Tea, ½ pound, at 60 cents	30	Tea, ½ pound, at 60 cents	30
Coffee, ½ pound, at 25 cents	12½	Coffee, 2 ounces, at 40 cents	05
Salt, 1 bag of 2 pounds	05	Salt	01
Potatoes, 1½ peck, at 30 cents	45	Potatoes, 1 peck	16
Fresh eggs, 1 dozen	18	Bacon, 1 pound	12
Bacon, home cured, 2 pounds, at 15 cents	30	Cheese, 1 pound, at 9 to 12 cents	09
Cheese, 1 pound	20	Butter, 1 pound	36
Butter, 2 pounds, at 25 cents	50	Sago and rice, 1 pound	06
Sago, ½ pound, at 15 cents	07½	Scotch oatmeal, ½ pound, at 6 cents	03
Scotch oatmeal, 1 pound	10	Spices	01
Spices	05	Total provisions	3 56
Total provisions	5 90	Rent	78
Rent	1 50	Boots and clothing	1 20
Boots and clothing	1 50	Fuel, blacking, beer, tobacco, and other incidentals	72
Fuel, blacking, beer, tobacco, and other incidentals	1 00	Rates and taxes	22
	9 99		6 48
Expenses per year of 52 weeks	519 48	Expenses per year of 52 weeks	336 96
Savings	43 02	Savings	12 96
Earnings	562 50	Earnings	~~339 92~~ 349.92

The difference in articles and quantities consumed in favor of an American potter consists in the following, per week: 6 pounds of meat, one-fourth pound of coffee, 1 pound of bacon, one-half peck of potatoes, 1 dozen fresh eggs, 1 pound of butter, and a few other unimportant items which, however, could be easily supplied if needed without much additional outlay. What the English potter or workman in general has to forego is the more liberal consumption of meat and albuminous diet, which gives the American workingman the greater stamina and working power, for which he is so justly celebrated. The meat price is quoted higher than in America. This is due to a certain feigned objection—gradually working off, however—to imported meats. The men whom I have asked all pretend that they only use the best English meat, and that Australian and American meat are only bought by the "poorer people," "the colliers," as the potters say. If the colliers were asked they would probably say the same and refer to some other class. With all that, however, a great deal of New Zealand meat is sold in this market, as I learn, of excellent quality and taste, at prices varying from 10 to 16 cents per pound. If cheaper cuts are bought a more liberal meat diet can easily be indulged in. Still I hear it frequently mentioned by people who have an insight into the living methods of the working classes that if they have the money they buy only the best pieces.

Corroborating this, I have been told lately by one of the largest employers of labor in Lancashire that the butchers in his town raised the price of prime cuts lately a penny a pound, saying that the demand for best cuts by the working classes was so great that they find it difficult to dispose of inferior pieces. Bread and potatoes form a great part of the diet, and 1 peck of potatoes a week is undoubtedly under the mark. But it is important to notice that potatoes and especially bread is so much cheaper here than in the United States. Good wheaten bread is sold at 2 cents a pound out of the very flour brought from America from which the bread is made, for which an American has to pay nearly double the price. The weight and measure is everywhere guaranteed and the sale of adulterated articles strictly prohibited unless sold as what they really are. Only the other day a dealer was heavily fined for selling ground coffee mixed with chicory, as pure coffee, although he pleaded ignorance and that the fault lay with the wholesale dealer who supplied him with the article as pure and unadulterated coffee. Nor is the difference in the price of goods bought in small quantities so very great. In America this takes quite a good proportion out of the workingman's earnings. Among the prices given to me by one of my workingwomen in New York as what she pays for her provisions, I find 5 cents a quart for potatoes, which is 100 per cent. over the barrel price. All measures are gauged. The full pint of the best ale is sold to outdoor customers at 6 cents and in the bar-room at 8 cents, and the half pint, containing twice as much as our American beer glasses (half foam and thick glass bottoms), at 4 cents. In Germany a glass of beer containing nearly twice as much as an American glass is sold for 10 pfennige, or 2½ cents.

The dollar or two dollars of the workingman must supply him with all the means of subsistence for himself and family, and the sick fund and reserve fund for old age or incapacity. Every 5 or 10 cent piece saved to him a day from leakages created by private or public taxgatherers mean to him either so much less comfort or so much more care and anxiety. It is therefore one of the most commendable endeavors of the British Government to bestow its care upon the enhancement of the purchasing power of the penny.

So far as clothing and dry goods in general are concerned I find that cotton goods are fully as cheap in the United States as here. Shirtings and sheetings if anything are superior in quality for the same money with us, so far as I can judge from the articles exposed for sale in the retail stores. Articles of underwear for women, made of muslin, are far superior in workmanship and finish and cheaper in price in the United States, counting the difference in the price of imported materials. Nor can I find that men's shirts, when chiefly of cotton, are any cheaper here. Of boots and shoes, if factory made, the same may be said, though the leather of the better class of ready-made goods seems to be superior here, that is, better tanned. Custom-made boots and shoes, however, are considerably below American prices. A very good pair of gentlemen's laced gaiters, made to order, can be had at $3.89 and rising to $7.29, the difference in price being largely due to the so-called stylishness of the shoemaker. Everything made to order in the way of clothing, excepting shirts, perhaps, is considerably cheaper here, while machine-made or factory made goods show disappearing differences only.

Goods made of wool, linen, and silk are considerably lower than our prices. A good suit of the best English tweed, worsted, or melton can be had, made to order, at from $15 to $20. A spring overcoat of excellent quality, with best silk sleeve-lining, I had measured for $18.25. The same articles can be had for much less if made of inferior goods or by cheaper tailors. The difference in the prices of ready-made things, as said above, is not so marked, however, and this is mainly due to the comparatively low price and superiority of tailor-made garments, on account of which they are preferred by the working classes even, and have not given the impetus to the wholesale manufacture of clothing which is maintained and supported in the United States, principally by the high cost of merchant tailor made articles of clothing. In workmanship and finish I find corresponding articles of the wholesale process of manufacture superior in the United States. This is true of clothing as well as of collars, cuffs, and like articles. Though not better in quality, yet the latter seem to have a more merchantable appearance to the eye. In many articles, such as ladies' underwear of muslin and linen, if freed from duties on embroideries and other imported materials, I have no doubt a good export trade could be established, in consequence of the much greater perfection in workmanship and finish than what I find here.

HOUSING.

Much has been said in the United States at different times, and repeated lately there, in quarters where full and reliable information on the subject might be justly expected, of the degrading condition and the promiscuous herding, without regard to sex, age, or relationship of the working potters in this district, of eight and even sixteen persons living in one room being the rule, &c., the papers brought reports as representing the conditions here. The statement naturally found its way into the papers here, and I have made diligent inquiry, therefore, from the vital statistics of the district with a view of getting at the true facts. I find a population of 200,758 of the pottery district is supplied with 37,803 houses, which gives one house to every 5.3 inhabitants.

Dividing the total among each of the towns comprising the potteries of North Staffordshire we find in each one the same ratio maintained.

Number of houses and inhabitants and number of inhabitants to each inhabited house in each of the towns of the pottery district of North Staffordshire.

Name of town.	Houses.	Inhabitants.	Inhabitants to each house.
Tunstall	5,429	29,673	5.46
Burslem	5,358	28,248	5.27
Hanley	10,176	54,274	5.33
Stoke	3,205	17,274	5.39
Fenton	2,682	14,136	5.27
Longton	3,498	18,615	5.30
Newcastle	4,092	20,996	5.13
Wolstanton	3,363	17,542	5.21

The average number of inhabitants to each inhabited house for the United Kingdom is 5.4. For the United States, according to the census, 5.6. As these totals include agricultural population, where there is naturally less crowding than in manufacturing districts, the figure 5.3 for the potteries certainly shows no state of overcrowding whatever, and statements such as those mentioned above, it must be clear from the figures, have no basis of facts whatever to stand upon. I have not been able to learn of many cases where more than one family inhabit one house. The workingmen's houses are all built on the cottage system, and mostly have one large front room immediately opening into the street, which serves as sitting-room or parlor, a kitchen in the rear, one large bedroom upstairs, taking the whole fronting on the street, with two windows, and in the larger houses two bedrooms in the rear. The outhouse is always in the yard. There are few houses so poor that have no flower-pots in the windows, and many have a flower-bed either in the yard, or, where practicable, a little plot in the front. The people show a great interest in flowers. The ground floors are paved with bricks; in the newer houses with tiles; some of the larger ones have boards. The sleeping-rooms are all floored with boards. Matting or carpet of some kind usually covers the floors of the lower rooms. As the life is an outdoor life, and the doors are open in summer time to the view of any passing visitor, it is easy to gain an insight into the home-life and habits of the working classes. The scrubbing and cleaning that goes on on a Saturday, and the general appearance itself of the rooms does give a very favorable impression as to cleanliness. Of course, there are exceptions to that to be found, especially in the poorer wards, but these exceptions make the generally favorable appearance only the more pronounced.

MARRIAGES AND BIRTHS.

Marriages here are contracted early in life. The many young couples one meets in the streets with a baby carriage and frequently one or two little pedestrians trotting alongside demonstrates this fact fully to the eye, as also the innumerable groups of little ones playing in the streets whom one has to circumnavigate in the walks on a sunny afternoon in the neighboring towns and villages. Thus the loss sustained by emigration is more than supplied by the new crop of Britons coming up with unfailing regularity. To get at the facts of the average marriage age, I tried to obtain from the registrars of the district the statistics covering the case. I have succeeded in two cases, which, however, corroborating each other, give a satisfactory review of the whole situation.

The registrar for Burslem, Tunstall, and Wolstanton, writes:

> I regret that it is not in my power to furnish you with any satisfactory statistics as to marriages for this district. I only attend and register at non-conformist places of worship and civil marriages at superintendent's office, and I have also a colleague who has perhaps about 10 per cent. more marriages in the year than I have, so that you can only get an approximate estimate. Subjoined is a brief summary of my marriages for 1884 and 1885, and I dare say it is a fair sample of the ages at which marriages are contracted in the district:

Year.	Under 20 years.	Over 20 and under 25.	Over 25 years.	Total.	Couples.
1884	9	78	57	144	72
1885	14	74	46	134	67

For the Stoke district the following are the facts (copy of registrar's letter):

> In reply to your letter of the 27th of May, I have to state that the total number of marriages attended by the registrars of marriages in the Stoke registration district

during the year 1885 was one hundred and twenty-seven, classified according to the ages mentioned in your letter, as follows:

Age.	Males.	Females.
Under the age of 20	1	9
Over 20 and under 25	64	61
Over 25 years of age	62	54

These marriages are those only which are attended and registered by registrars of marriages, and do not include those which are celebrated in the English Church or amongst the Jews, the former of which are registered by the officiating ministers and the latter by a registering officer of the Jews.

The greater portion of marriages are celebrated under twenty-five years of age.

The birth rate per 1,000 inhabitants and of illegitimacy per 1,000 births is as follows in the different countries of Europe, according to the best statistical authorities:

Number of births to 1,000 *inhabitants and number of illegitimate children in* 1,000 *births in different parts of Europe.*

Countries.	Births to 1,000 inhabitants.	Illegitimates to 1,000 births.	Countries.	Births to 1,000 inhabitants.	Illegitimates to 1,000 births.
England	35.80	45	Holland	36.2	35
Scotland	35.20	89	Belgium	32.2	70
Ireland	26.50	23	Denmark	31.2	112
France	25.6	76	Sweden	30.8	102
Germany	39.8	84	Italy	36.9	68
Austria	39.9	129	Spain	37.2	55
Hungary	43.0	....			

The statistics of my immediate district show the following data:

Number of births and illegitimate births, and illegitimate births in 1,000 *births, in the pottery district in the year* 1885.

STOKE-UPON-TRENT REGISTRATION DISTRICT.

Towns.	Births.	Legitimate.	Illegitimate.	Illegitimates in 1,000 births.
Hanley	1,077	1,034	43	40
Shelton	1,081	1,030	51	47
Stoke	679	620	59	86
Fenton	618	587	31	50
Longton	864	777	87	100
Total	4,319	4,048	271	63

WOLSTANTON REGISTRATION DISTRICT, 1884.

Wolstanton	765	731	34	44
Tunstall	1,271	1,179	92	72
Burslem	1,204	1,140	64	53
Total	3,240	3,040	190	58

CHARITABLE INSTITUTIONS.

The charitable institutions of the district are in excellent condition. I have visited the North Staffordshire Infirmary, erected and supported by voluntary contributions, and cannot say that I have ever found an establishment better fitted up and kept in finer trim for its purposes. The scrupulous cleanliness in which all wards and departments are kept is well worthy of mention here. The receipts are from private donations and income from investments. I inclose an annual balance sheet which gives in full all details of income and expenditure and the amounts spent for each item, as it may serve a valuable purpose to compare with our cost for the maintenance of an average of about 175 patients and some 60 attendants:

Statement of accounts from October 25, 1884, to October 25, 1885.

RECEIPTS.

	£	*s.*	*d.*	£	*s.*	*d.*
Subscriptions	2,226	3	6			
Arrears of subscriptions	77	14	0			
Subscriptions to children's wards	54	10	6			
				2,358	8	0
Establishment subscriptions				3,508	11	3
Donations:						
The North Staffordshire Charity Football Association, per Messrs. Allen & Slaney	63	0	0			
Mrs. Hitchman, Fenton House, to the children's wards	50	0	0			
An unknown friend, per Mr. C. Cooper, Stoke-on-Trent (6th donation, £275 in all)	50	0	0			
The Sutherland Lodge of Freemasons, Newcastle-under-Lyme, to children's wards	5	5	0			
Mrs. Allison, in acknowledgment of the kindness and attentions received by her son, the late Mr. F. Allison, formerly of Launceston, Tasmania	5	0	0			
Miss S. Ford, Chesterton, to the children's wards	4	4	0			
Sundry donations	11	0	0			
				188	9	0
Hospital Sunday and Saturday:						
Hospital Sunday collections, as per list	718	7	6			
Children's collections in Sunday schools, &c., for the children's wards	17	1	3			
				735	8	0
Hospital Saturday collections, as per list				155	17	0
Miscellaneous:						
The managers of the North Staffordshire Infirmary coffee stall, per Mrs. Samuda	31	10	0			
Part proceeds of the Sir Moses Montefiore Centenary in the Hebrew Synagogue, Hanley	3	0	0			
Fenton Ice Accident Fund, per the Mayor of Stoke-upon-Trent	2	7	6			
Proceeds of concert at Hanchurch, per J. Martin	2	0	3			
Anonymous	2	2	0			
Contents of charity box—North Stafford Infirmary	1	7	4			
Grapes Hotel, Stoke-upon-Trent, collected in smoke room	0	13	6			
Payments with patients—children's wards	10	0	0			
Payments with patients—Victoria wards	1	0	0			
Acknowledgments, compromises, and fines	11	10	8			
A thank offering	0	10	0			
Payment by a visitor	1	5	6			
Dripping sold	47	2	9			
Bones sold	3	3	7			
Hay and grass sold	22	0	0			
Ice sold	0	18	9			
Profit on pigs (besides 2,150 pounds used for the house, value £49 15*s.* 9*d.*)	53	12	11			
				194	4	9

	£	s.	d.	£	s.	d.
Funded property, &c.:						
Twelve months' dividend on £80 North Staffordshire Railway Company, Trent and Mersey Navigation preference shares	3	17	9			
Twelve months' interest on £14,300 Stoke-on-Trent Corporation debenture	555	18	3			
Twelve months' interest on £612 4*s.* 11*d.*, Longton Corporation stock	22	5	0			
Twelve months' dividend on £470 3*s.* consolidated 3 per cent. annuities	13	13	3			
Twelve months' interest on £955 2*s.* 6*d.*, Midland Railway debenture stock	34	19	9			
Twelve months' interest on £956 5*s.*, London and North-western Railway debenture stock	34	19	9			
Twelve months' interest on £588 10*s.*, North Staffordshire Railway debenture stock	22	14	4			
Twelve months' interest on £7,235 4*s.* 4*d.*, Manchester ground rents	351	4	2			
Twelve months' interest on £4,910, Wimbledon ground rents	208	13	5			
Twelve months' interest on £750, Crewe ground rents	32	18	9			
Twelve months' interest on £3,645, Rusholme ground rents	157	5	6			
Twelve months' interest on £1,780 3*s.* 6*d.*, Blackburn ground rents	78	18	9			
Three months' interest on £1,000, New Zealand Government bonds	12	1	8			
				1,529	10	4
				8,670	9	4
Interest allowed by the treasurer, second half year				3	4	0
				8,673	13	4
Balance carried down, deficiency				219	3	11
				8,892	17	3

EXPENDITURE.

	£	s.	d.	£	s.	d.
Butcher's meat (exclusive of house pigs, 2,150 pounds)	1,468	8	9			
Corned beef	9	10	3			
Potatoes	57	17	0			
Vegetables	5	0	6			
Bread	316	1	1			
Fish and poultry	249	6	6			
Meal and flour	16	1	11			
Milk	412	2	0			
Cheese	65	4	2			
Butter	359	10	2			
Eggs	52	17	2			
Tea	93	7	10			
Coffee and cocoa	36	10	4			
Moist sugar	36	9	6			
Lump sugar	20	1	6			
Rice	20	8	6			
Sago, &c	70	1	6			
Soap	29	17	2			
Soft soap	87	16	8			
Candles	5	9	10			
Gas	257	15	0			
Ale, porter, and beer	127	12	0			
Water	35	13	6			
Earthenware and glass	30	5	6			
Coals and slack	421	8	0			
Linen drapery	230	2	3			
Wines and spirits	59	8	0			
Furniture	125	19	3			
Upholsterer	117	7	1			
Beeswax and turpentine	39	4	0			
Fire lighters	5	15	0			
Sundries	1	14	11			
				4,854	6	0

	£	s.	d.	£	s.	d.
Dispensary:						
Drugs	533	19	9			
Spirits of wine	101	15	0			
Calico, lint, and cotton wool	73	11	4			
Earthenware and glass	10	4	9			
Instruments	75	3	7			
Labels and paper	9	4	8			
Gutta-percha, jaconet, and gauze	75	5	0			
Soda-water and lemonade	9	5	0			
Water beds and waterproof sheeting	26	17	6			
Plaster, oakum, tow, and sponges	57	14	0			
Carriage of goods	13	6	3			
Sundries	7	19	0			
				994	6	8
Salaries and wages:						
House surgeon, house physician, secretary and house steward, secretary's assistant, dispenser, superintendent of nurses, and housekeeper	770	18	7			
Engineer and stoker, gardeners, porters, nurses, and servants	993	17	11			
				1,764	16	6
Miscellaneous:						
Advertising, general account, £11 13*s.* 3*d*; hospital Sunday and Saturday, £6 18*s.* 6*d*	18	11	9			
Insurance	20	0	0			
Postage, stationery, and printing, general account, £89 7*s.* 10*d.*; hospital Sunday and Saturday, £31 10*s.* 6*d*	120	18	4			
Painting, plumbing, glazing, and cleaning, painting and whitewashing wards, &c	290	11	0			
Ice	20	18	10			
Hay, straw, and corn	6	8	0			
Engine and smith's work	53	13	5			
Joiner's and bricklayer's work	237	5	0			
Solicitors' charges and disbursements	6	3	0			
Annual grant to medical library	10	0	0			
Contract ticket, N. S. Railway	9	3	9			
Garden seeds, plants, and manure	21	0	8			
Labor in grounds	1	15	0			
Porter's uniform	4	10	0			
Louvres to windows, ward 7, &c	17	11	0			
Rent and maintenance of telephones	43	0	0			
Rent of house	25	0	0			
New fire hose and fittings	32	1	0			
Hand-grenade fire extincteurs	5	2	0			
New kitchen range	27	4	6			
Hot-water boiler and connections	56	4	0			
Wire mattresses to medical wards	107	2	6			
Book cupboard for board room	16	10	0			
Alterations to surgery, to form examination room	22	11	0			
Lead coverings to ward lavatories	10	9	0			
Paving at front entrance, &c	12	0	11			
Saddler's work	3	19	2			
Burial of patients	4	8	0			
Sweep	7	9	3			
Barber	3	18	0			
Sundry payments ordered by the committee	48	4	6			
Sundries	10	5	2			
				1,273	18	9
				8,887	8	9
Interest charged by the treasurer, first half year				5	8	6
				8,892	17	3

Underneath I give the expenditure since 1875 and average per bed and per patient:

Expenditure since 1875, and averages per bed and per patient.

Year.	Total expenditure.	Cost of each in-patient.	Cost of drugs for each out-patient.	Cost of bed occupied for the whole year.	Cost per inmate (patients and household) per week in provisions, stimulants, and gas.	Daily average of patients in ward.	Daily average of household.	Average stay in days of each in-patient.
	£	£ s. d.	s. d.	£ s. d.	s. d.			
1875-'76	7,321	5 17 0	2 4½	65 0 4	7 4½	112.6	48.9	36
1876-'77	7,404	4 18 9	2 8¼	64 1 2	7 7½	115.7	49.7	31.78
1877-'78	8,234	4 12 0¾	2 8	57 6 4	7 4	143.6	54.6	33.75
1878-'79	8,085	4 8 6	2 2½	52 10 4	6 9	154.08	50.7	35.44
1879-'80	8,012	4 9 11	2 8	54 17 7	7 1¼	146.5	57	35.27
1880-'81	7,716	4 9 5	2 2	56 14 10	7 1¾	136	57	33.07
1881-'82	8,042	4 2 9	2 4	58 5 6	6 3	138	58	29.32
1882-'83	9,005	4 11 4½	2 4	59 5 0	7 8½	152	60	31.63
1883-'84	7,965	4 5 9	1 8½	57 0 9	7 0¾	140	59	30.51
1884-'85	8,887	4 16 10¾	1 9¾	54 16 0	6 9	162	59	35.62

The comparative cost per head per day for the month of January, in each of the last four years for provisions consumed, was as follows: Cost of rations, &c., 1886, 22.79 cents; 1885, 24.46 cents; 1884, 24.10 cents; 1883, 25.36 cents. The present year shows the smallest expenditure, due to the low range of prices. The average daily number for the same period was as follows:

Character of relief.	1886.	1885.	1884.	1883.
Children	8	13	13	11
Patients	175	162	143	146
Establishment	62	60	60	58
Total	237	222	203	204

The cost of the daily ration was distributed among the various victuals forming the ration, as follows:

Cost per head per day in undermentioned items.

Articles.	1886.	1885.	1884.	1883.
	Cents.	*Cents.*	*Cents.*	*Cents.*
Bread, flour, and meal	1.90	2.10	2.28	2.40
Milk	2.26	2.44	2.26	2.42
Groceries	1.68	1.48	1.54	1.70
Cheese and butter	2.64	2.54	2.74	2.62
Butcher's meat	8.20	9.06	9.64	10.38
Potatoes and vegetables	.85	.38	.34	.70
Eggs	.48	.34	.34	.38
Beer, ale, and porter	.72	.74	.86	.56
Wines and spirits	.40	.38	.18	.52
Soap and candles	.74	.74	.80	.80
Fish and poultry	1.52	1.60	.92	.90
Gas	1.70	2.66	2.20	1.68
Total	22.79	24.46	24.10	25.36

The cost of a ration per head is considerably in excess of what it would be to householders, as no meal or part of a meal which has once entered a sick room is ever used again on hygienic grounds.

The cost of the principal items of diet to the infirmary are as follows:

Bread	per pound..	$0 02
Milk	per gallon..	20
Coffee	per pound..	26
Tea	do....	42
Sugar	do....	4½-5
Rice	do....	2½
Cheese	do....	10
Best butter	do....	26
Beef	do....	13
Mutton	do....	13½
Pork and veal	do....	13
Potatoes	per 252 pounds..	1 70
Fish	per pound..	5
Gas	per 1,000 feet..	73

This list of prices will give a fair comparison with prices paid in America by the quantity, and under like favorable terms and purchasing advantages.

The directors are of the most prominent and wealthiest people of the district, and the personal care and attendance they devote to this charitable purpose shows its fruit in the general appearance and favorable conditions of this benevolent institution.

As to poverty, there was a good deal of suffering this last winter, but the cases mostly belonged to the building trades, which, on account of the long and severe winter, suffered great interruption.

Otherwise I cannot find much in the queries sent out by the Department which is not covered by what has been said heretofore. Pauper emigration there is none, nor can I learn that the local or general government are assisting emigrants. The few that go, go voluntarily.

J. SCHOENHOF,
Consul.

UNITED STATES CONSULATE,
Tunstall, August 14, 1886.

SCOTLAND.

REPORT OF CONSUL MALMROS.[*]

The instructions of the Department are to report upon the emigration from this consular district to the United States. As, however, no records are kept either by the local authorities or those of the United Kingdom, classifying emigrants according to the localities they belong to otherwise than by drawing the broad distinction as to whether they have been residents of either England, Scotland, or Ireland, I have found it impossible, in regard to a number of statistics, to report separately upon the emigration from this consular district. Whenever, therefore, figures are given referring to the entire area of Scotland and not to this district only it must be understood as resulting from the circumstances just mentioned.

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[*] For good reasons Consul Malmros was unable to forward his report in time for its insertion in the volume of Reports on Emigration, and it is first printed in this place.

In the classification of emigrants according to their occupation the fact of their being British subjects only is considered worthy of attention by the authorities, and the records do not, therefore, show what number of persons following each occupation emigrate from each of the three great subdivisions of the country, England, Scotland, and Ireland, separately. It is, however, believed, and I think correctly, that the proportion which each of the several principal occupations represented amongst emigrants from England bears to the total number of emigrants from that section of the Kingdom does not vary greatly from that which emigrants of the same occupations from Scotland bear to the aggregate emigration from the latter section. When we come to Ireland the case is different. In the total emigration from that island the relative proportion of the agricultural classes, general laborers, and domestic servants is considerably larger, and of the industrial classes smaller, than in the emigration from either England or Scotland, but by how much the one is larger and the other smaller can, with such facts as are at present obtainable, not be ascertained with any degree of accuracy.

The subjoined table contains a list of emigrants to the United States of British and Irish origin during the years from 1879 to 1885 classified according to sex, occupation, proportionate percentage irrespective of occupation, and including infants of each of the nationalities mentioned.

TABLE A.—*Emigration from Great Britain and Ireland to the United States.*

	1879.		1880.		1881.		1882.		1883.		1884.		1885.	
	No.	*P. ct.*	*No.*	*P. ct.*	*No.*	*P. ct.*	*No.*	*P. ct.*	*No.*	*P. ct.*	*No.*	*P. ct.*	*No.*	*P. ct.*
Adult males.														
Agricultural and general laborers, gardeners, carters, domestic servants, &c	18,842	24.33	43,951	31.62	50,619	35.16	53,557	35.31	50,047	32.93	39,878	31.15	31,261	26.89
Industrial classes, including mechanics, butchers, &c	12,356	15.95	12,363	8.89	12,779	8.87	10,410	6.99	11,494	7.48	9,551	7.46	8,919	7.67
Gentlemen, professional men, agents, clerks, &c	5,300	6.84	6,288	4.52	7,622	5.29	9,131	6.13	8,688	5.62	7,985	6.23	5,652	4.86
Farmers and graziers	3,186	4.11	5,596	4.02	3,186	2.21	3,564	2.39	4,363	2.82	3,023	2.33	3,518	3.02
Seamen	117	.15	106	.07	105	.07	56	.03	115	.07	170	.13	180	.16
Naval and military men	32	.04	15	.01	26	.02	18	.01	53	.03	6	.00	4	.00
Other trades and professions	1,155	2.00	2,281	1.63	2,220	1.54	1,442	.96	1,215	.78	697	.54	622	.53
Males, occupation not stated	7,264	9.38	9,895	7.12	9,682	6.72	11,055	7.42	12,120	7.83	12,188	9.52	17,303	14.88
Adult females.														
Domestic and farm servants, &c	5,624	7.26	14,356	10.33	14,901	10.35	14,346	9.63	19,482	12.60	14,296	11.16	14,915	12.83
Gentlewomen and governesses	33	.04	27	.02	37	.02	42	.03	25	.02	24	.02	52	.04
Milliners, shopwomen, &c	212	.27	165	.11	155	.11	325	.21	515	.33	342	.26	380	.32
Other trades and professions	156	.20	174	.12	362	.25	334	.22	452	.29	246	.19	161	.13
Females, occupation not stated	22,854	29.50	43,772	31.49	42,240	29.34	45,567	30.61	45,150	29.20	39,607	30.94	33,246	28.66
	77,431	......	138,969	......	143,934	......	148,847	......	154,619	......	128,013	......	116,219	......
Children from 1 to 12 years, and infants	14,375	......	27,601	......	32,170	......	33,056	......	36,954	......	27,267	......	21,468	......
Total	91,806	......	166,570	......	176,104	......	181,903	......	191,573	......	155,280	......	137,687	......
English	......	57	......	42	......	52	......	52	......	49	......	53	......	53
Scotch	......	10	......	8	......	10	......	10	......	8	......	9	......	10
Irish	......	33	......	50	......	38	......	38	......	43	......	38	......	37

CHARACTER OF EMIGRATION.

While the exact proportion of emigrants which the different classes of society furnish cannot be stated, it is certain that agriculturists, operatives in manufactories, and mechanics furnish the great body of emigrants from this district. Those drawn from the other classes are numerically not important. The morality, taking this word in its broad and not merely sexual sense, of the emigrants is good, and fully up to the average of that of the respective classes to which they belong. They are as a rule of good character, of frugal, industrious habits, either church members, or at least attend church service with considerable regularity, and are animated by a desire to succeed in life. Frugality is, however, generally speaking, not one of the virtues of coal miners. Worthless members of society amongst the emigrants are infrequent exceptions. The working classes are, however, not without faults, the most prominent of which is drunkenness, a vice here but too often met with. In this respect they compare unfavorably with the masses of some other countries; for example, of Italy or Greece. But inquiries on this subject have convinced me that a great improvement in this respect has taken place in the course of the last thirty or forty years; in fact, older, trustworthy persons, who either still are workingmen, or who commenced their life as such, agree in stating from their own personal experience that drunkenness amongst the classes from which the emigrants are principally drawn has diminished at least 50 per cent. since about 1850. Official or other reliable statistics on the subject are not published. The higher and the elementary education is well provided for, and meets the wants and just expectations of the community. Of the secondary education, *i. e.*, the one destined for the training of children for commercial, technical, and industrial pursuits, the same cannot be said. Its deficiencies are generally acknowledged and will be remedied in the near future.

The following table (B) of marriages in Scotland from 1855 to 1884, containing the percentage of those who signed marriage contract by writing and of those who signed by mark, shows the great progress in elementary education in Scotland during those years, reducing the percentage of illiteracy by nearly one-half.

TABLE B.—*Marriages in Scotland,* 1855–1884.

Years.	Percentage who married.						Percentage who signed.			
	Under 21 years.		Under 25 years.		Above 25 years.		By writing.		By mark.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
1855	(?)	(?)	39.44	57.99	60.56	42.01	88.60	77.10	11.40	22.90
1856	(?)	(?)	40.79	58.44	59.21	41.56	89.13	76.05	10.87	23.95
1857	7.47	21.43	42.19	58.84	57.81	41.16	87.89	75.34	12.11	24.66
1858	7.38	21.23	41.25	58.70	58.75	41.30	88.16	75.95	11.84	24.05
1859	7.42	21.60	41.22	58.80	58.78	41.20	89.58	77.80	10.42	22.10
1860	7.36	21.77	40.89	58.89	59.11	41.11	89.68	78.28	10.32	21.72
1861	7.09	21.18	40.96	58.72	59.04	41.28	89.39	78.67	10.61	21.33
1862	7.62	21.86	42.11	59.35	57.89	40.65	89.90	79.65	10.01	20.85
1863	7.91	22.03	43.79	59.93	56.21	40.07	89.14	77.89	10.86	22.11
1864	7.46	21.99	42.57	59.73	57.42	40.26	88.54	76.12	11.46	23.88
1865	7.16	21.26	41.38	58.84	58.62	41.16	88.58	77.78	11.42	22.22
1866	7.20	20.69	41.91	58.52	58.09	41.48	88.78	78.50	11.22	22.00
1867	6.77	20.41	40.63	57.47	59.37	42.53	89.41	79.27	10.59	20.78
1868	6.68	20.45	39.60	57.00	60.31	43.00	90.19	80.99	9.81	19.01
1869	7.08	20.87	39.70	57.34	60.30	42.66	89.92	80.04	10.08	19.96
1870	7.32	21.73	40.52	57.60	59.48	42.40	89.73	80.46	10.27	19.54
1871	7.58	22.15	41.20	58.06	58.80	41.94	90.05	80.42	9.95	19.58
1872	7.71	22.10	41.78	58.32	58.22	41.68	89.56	79.48	10.44	20.52
1873	8.33	22.91	43.26	59.58	56.74	40.42	90.38	81.33	9.62	18.67
1874	8.25	22.73	43.29	59.40	56.71	40.60	90.90	82.01	9.10	17.99
1875	8.10	22.44	42.58	58.72	57.42	41.28	91.40	83.09	8.60	16.91
1876	8.18	22.63	43.16	59.26	56.84	40.74	92.50	83.87	7.50	16.13
1877	7.98	22.34	43.06	59.46	56.94	40.54	92.44	84.59	7.56	15.41
1878	7.71	22.32	42.77	59.75	57.23	40.25	93.13	85.55	6.87	14.45
1879	7.64	22.06	42.11	59.00	57.89	41.00	92.37	84.69	7.63	15.31
1880	7.22	22.01	41.71	59.69	58.29	40.31	92.62	84.79	7.38	15.21
1881	6.98	22.27	41.60	59.69	58.40	40.31	92.94	86.06	7.06	13.94
1882	7.75	22.54	41.85	60.11	58.15	39.89	93.15	86.84	6.85	13.16
1883	7.54	22.09	41.45	59.50	58.55	40.41	93.64	87.90	6.36	12.10
1884	7.37	22.60	40.72	58.90	59.28	41.10	93.84	88.67	6.16	11.33

TABLE C.—*Percentage of those who signed the marriage contract by writing and of those who signed it by mark for the year 1884 alone, by groups of districts, divisions, and counties, and also separately, of the cities of Edinburgh and Glasgow.*

	Signed by writing.		Signed by mark.		Persons under 21 years.	
	Men.	Women.	Men.	Women.	Men.	Women.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
Scotland	93.84	88.07	6.16	11.83	7.87	22.30
Groups.						
Principal town districts	93.57	87.66	6.43	12.34	8.25	23.87
Large town districts	93.19	88.81	6.81	11.19	9.28	24.23
Small town districts	93.32	87.82	6.68	12.18	6.68	22.11
Mainland, rural	96.50	74.80	3.50	5.20	5.52	19.06
Insular, rural	83.53	62.14	16.47	37.86	2.38	13.75
Divisions.						
Northern	98.20	90.51	1.80	9.49	3.76	16.04
Northwestern	79.36	57.40	20.64	42.60	0.84	12.89
Northeastern	98.23	96.11	1.77	3.89	6.05	18.99
East Midland	96.93	91.84	3.07	8.16	8.61	20.64
West Midland	91.66	88.37	8.34	11.63	5.90	21.12
Southwestern	91.46	85.11	8.54	14.89	8.75	26.04
Southeastern	96.93	95.21	3.07	4.79	5.73	20.44
Southern	97.50	96.78	2.50	3.22	6.88	16.71
Counties.						
Shetland	97.71	83.43	2.29	16.57	5.71	11.43
Orkney	100.00	99.43	0.00	0.57	3.43	18.29
Caithness	96.63	90.45	3.37	9.55	3.93	19.10
Sutherland	98.80	86.75	1.20	13.25	0.00	14.46
Ross and Cromarty	73.92	46.41	26.08	53.59	0.48	11.96
Inverness	84.76	68.33	15.24	31.67	1.19	13.81
Nairn	93.83	86.67	6.67	13.33	2.22	4.44
Elgin	97.28	94.16	2.72	5.84	3.50	11.67
Banff	98.21	94.88	1.79	5.12	6.14	16.11
Aberdeen	98.54	96.97	1.46	3.03	6.88	21.06
Kincardine	97.88	95.77	2.12	4.23	2.65	19.58
Forfar	95.91	87.16	4.09	12.84	10.36	22.91
Perth	98.51	95.66	1.49	4.34	5.43	18.32
Fife	97.55	95.98	2.45	4.02	8.13	20.63
Kinross	100.00	98.08	0.00	1.92	3.85	19.23
Clackmannan	96.48	94.37	3.52	5.63	7.04	14.79
Stirling	93.03	93.60	6.97	7.40	7.08	23.47
Dumbarton	88.48	83.59	11.52	16.41	5.47	20.51
Argyll	92.60	86.39	7.40	13.61	4.14	18.05
Bute	95.56	90.00	4.44	10.00	1.11	17.78
Renfrew	92.10	87.57	7.90	12.43	8.66	24.81
Ayr	43.93	87.73	6.07	12.27	7.13	22.07
Lanark	90.87	84.11	9.13	15.89	9.07	27.02
Linlithgow	92.66	91.96	7.34	8.04	6.64	30.77
Edinburgh	97.38	95.51	2.62	4.49	5.65	20.16
Haddington	94.20	91.30	5.80	8.70	6.76	23.67
Berwick	97.70	97.70	2.30	2.30	5.75	11.49
Peebles	98.63	98.63	1.37	1.37	6.85	13.70
Selkirk	98.15	96.30	3.70	3.70	2.78	13.89
Roxburgh	98.41	96.83	1.59	3.17	6.35	13.49
Dumfries	97.48	98.17	2.52	1.83	6.86	18.70
Kircudbright	98.23	98.23	1.77	1.77	5.75	16.37
Wigtown	95.59	92.16	4.41	7.84	8.82	16.67
Edinburgh	97.65	96.06	2.35	3.94	5.44	17.62
Glasgow	90.73	82.48	9.27	17.52	9.39	26.42

TABLE D.—*Number and proportion of men and women in Scotland at each quinquennial period of age who contracted marriage during the years* 1855–1884.

Ages.	Men.		Women.	
	Number who married at each age.	Percentage at each age to total marriages.	Number who married at each age.	Percentage at each age to total marriages.
15 to 20 years	21,364	3.03	91,977	13.02
20 to 25 years	272,739	38.61	323,077	45.73
25 to 30 years	211,391	29.92	167,649	23.73
30 to 35 years	87,741	12.42	60,523	8.57
35 to 40 years	45,786	6.48	31,777	4.50
40 to 45 years	27,079	3.83	16,677	2.36
45 to 50 years	16,898	2.39	8,317	1.18
50 and above	22,773	3.22	5,295	0.75
Not stated	670	0.10	1,144	0.16
Total	706,436	100.00	706,436	100.00

DIVORCE.

Statistics of decrees in divorce cases in Scotland are not published or collected, but I have succeeded in obtaining them from the records for the years 1875 to 1885, as shown in the table below, marked E:

TABLE E.—*Decrees in divorce cases pronounced in court of session from* 1875 *to* 1885, *inclusive.*

Year.	Artisans.	Agriculturists.	Merchants.	Professional.	Others.	Total.	Year.	Artisans.	Agriculturists.	Merchants.	Professional.	Others.	Total.
1875	16	1	5	4	15	41	1882	24	2	5	4	25	60
1876	20	2	8	8	29	67	1883	23	2	9	7	23	64
1877	21	2	9	5	27	64	1884	25	3	17	4	24	73
1878	28	1	7	7	27	70	1885	30	4	16	2	28	80
1879	24	3	9	7	14	57							
1880	27	1	7	6	33	74	Total	259	23	110	60	273	725
1881	21	2	18	6	28	75							

The divorces referred to are all divorces from the bonds of matrimony. Decrees for mere separation from bed and board are seldom made in Scotland. Their proportion to absolute divorces is very nearly that of 1 of the former to each 50 of the latter.

Tables marked F and G, respectively, contain, the former statistics of percentage of illegitimate to total births in Scotland as a unit during the years 1855 to 1884, the latter table contains information on the same subject, but for the year 1884 only, and grouped according to districts, divisions, and counties.

A remarkable feature of illegitimacy in Scotland, as will be seen by reference to the following tables, is its very high percentage in the purely agricultural districts, largely exceeding that in towns and large cities. In this respect it differs from all other countries. In France, taking a typical example, illegitimate births in the rural districts average 4 per cent., in towns 20 per cent., and in Paris 27 to 32 per cent.

VITAL STATISTICS.

Table F.—*Population estimated to the middle of each year, with the number of births, deaths, and marriages registered in Scotland during each of the years* 1855 *to* 1884, *and their proportion to the population; also the excess of births over deaths, the illegitimate births, and their proportion to the total births.*

Years.	Estimated population.	Births.		Deaths.	Marriages.	Excess of births over deaths.	Percentage to population.			Per cent. of illegitimate to total births.
		Total.	Illegitimate.				Births.	Deaths.	Marriages.	
1855	2,978,065	93,849	7,357	62,004	19,680	31,845	3.1491	2.0820	0.6608	7.8
1856	2,995,771	101,821	8,695	58,529	20,740	43,292	3.3988	1.9537	0.6923	8.5
1857	3,012,310	103,415	8,869	61,906	21,369	41,509	3.4331	2.0551	0.7094	8.6
1858	3,027,665	104,018	9,354	63,539	19,655	40,479	3.4356	2.0986	0.6492	8.9
1859	3,041,812	106,543	9,715	61,714	21,201	44,829	3.5026	2.0288	0.6969	9.1
1860	3,054,788	105,629	9,786	68,170	21,225	37,859	3.5578	2.2316	0.6948	9.2
1861	3,069,404	107,009	9,929	62,341	20,896	44,668	3.4863	2.0310	0.6808	9.2
1862	3,097,009	107,069	10,376	67,195	20,597	39,874	3.4572	2.1697	0.6651	9.7
1863	3,126,879	109,341	10,948	71,481	22,234	37,860	3.4968	2.2860	0.7160	10.0
1864	3,156,021	112,333	11,197	74,416	22,725	37,917	3.5594	2.3579	0.7200	9.9
1865	3,185,487	113,070	11,262	70,891	23,611	42,179	3.5496	2.2255	0.7412	9.9
1866	3,215,129	113,667	11,673	71,348	23,688	42,319	3.5354	2.2191	0.7367	10.3
1867	3,245,098	114,044	11,148	69,067	22,618	44,976	3.5063	2.1284	0.6970	9.7
1868	3,275,350	115,514	11,354	69,416	21,855	46,098	3.5267	2.1193	0.6673	9.8
1869	3,305,885	113,354	11,066	75,875	22,144	37,479	3.4288	2.2951	0.6698	9.7
1870	3,336,707	115,390	11,108	74,165	23,854	41,225	3.4582	2.2227	0.7149	9.6
1871	3,368,921	116,128	11,077	74,712	24,019	41,416	3.4470	2.2177	0.7130	9.5
1872	3,404,768	118,765	10,927	75,794	25,041	42,971	3.4882	2.2261	0.7381	9.2
1873	3,441,056	119,700	10,925	76,946	26,748	42,754	3.4786	2.2361	0.7773	9.1
1874	3,477,704	123,711	10,991	80,720	26,300	42,991	3.5573	2.3211	0.7563	8.9
1875	3,514,744	123,578	10,786	81,767	25,974	41,811	3.5160	2.3264	0.7390	8.73
1876	3,552,813	126,534	11,029	74,129	26,579	52,405	3.5621	2.0869	0.7482	8.72
1877	3,590,022	126,822	10,568	73,937	25,819	52,885	3.5326	2.0595	0.7191	8.33
1878	3,628,268	126,773	10,641	76,793	24,358	49,980	3.4940	2.1165	0.6713	8.39
1879	3,665,443	125,730	10,727	73,347	23,519	52,383	3.4301	2.0010	0.6416	8.53
1880	3,705,904	124,570	10,589	75,803	24,505	48,767	3.3613	2.0454	0.6612	8.50
1881	3,745,485	126,171	10,484	72,325	26,004	53,846	3.3686	1.9310	0.6943	8.31
1882	3,785,400	126,158	10,546	72,989	26,596	53,169	3.3328	1.9282	0.7026	8.36
1883	3,825,744	124,458	10,114	76,891	26,869	47,567	3.2532	2.0098	0.7023	8.13
1884	3,866,521	129,157	10,439	75,168	26,106	53,989	3.3404	1.9441	0.6752	8.08

Table G.—*Number of births, deaths, and marriages in* 1884, *and their proportion to the population, estimated to the middle of the year, in Scotland, its groups of districts, its divisions and counties; also the number of illegitimate births and their proportion to the total births.*

Divisions and counties.	Population estimated to middle of year 1884.	Total births.		Illegitimate births.		Deaths.		Marriages.	
		Number.	Percentage to population.	Number.	Percentage to births.	Number.	Percentage to population.	Number.	Percentage to population.
Scotland	3,866,521	129,157	3.3404	10,439	8.08	75,168	1.9441	26,106	0.6752
Principal town districts	1,487,062	54,156	3.642	3,995	7.4	34,025	2.288	12,242	0.823
Large town districts	409,796	14,549	3.550	968	6.7	8,248	2.013	2,877	0.702
Small town districts	821,898	27,497	3.345	2,188	8.0	14,917	1.815	5,166	0.629
Mainland rural districts	1,017,858	29,740	2.922	3,098	10.4	16,024	1.574	5,232	0.514
Insular rural districts	129,872	3,215	2.476	196	5.9	1,954	1.505	589	0.454
Divisions.									
Northern	122,998	3,007	2.445	255	8.5	1,827	1.485	611	0.497
Northwestern	165,749	4,242	2.559	267	6.3	2,590	1.563	838	0.506
Northeastern	426,383	13,820	3.241	1,944	14.1	7,135	1.673	2,596	0.609
East Midland	616,472	19,218	3.117	1,595	8.3	11,317	1.836	4,006	0.650
West Midland	295,192	9,297	3.149	603	6.5	5,321	1.803	1,643	0.557
Southwestern	1,456,318	55,472	3.809	3,572	6.4	32,375	2.223	11,349	0.779
Southeastern	571,966	18,262	3.193	1,400	7.7	10,826	1.893	3,944	0.690
Southern	211,453	5,839	2.761	804	13.8	3,777	1.786	1,119	0.529

TABLE G.—*Number of births, deaths, and marriages in* 1884, *&c.*—Continued.

Divisions and counties.	Population estimated to middle of year 1884.	Total births.		Illegitimate births.		Deaths.		Marriages.	
		Number.	Percentage to population.	Number.	Percentage to births.	Number.	Percentage to population.	Number.	Percentage to population.
Counties.									
Shetland	29,115	718	2.466	37	5.2	434	1.491	175	0.601
Orkney	32,301	745	2.306	55	7.4	479	1.483	175	0.542
Caithness	39,491	1,028	2.603	121	11.8	568	1.438	178	0.451
Sutherland	22,086	516	2.336	42	8.1	346	1.567	83	0.376
Ross and Cromarty	78,632	1,989	2,530	100	5.0	1,186	1.508	418	0.532
Inverness	87,117	2,253	2.586	167	7.4	1,404	1.612	420	0.482
Nairn	9,008	237	2.631	31	13.1	157	1.743	45	0.500
Elgin	45,293	1,456	3.215	220	15.1	744	1.643	257	0.567
Banff	60,079	2,082	3.465	335	16.1	969	1.613	391	0.651
Aberdeen	276,416	8,940	3.234	1,226	13.7	4,686	1.695	1,714	0.620
Kincardine	35,587	1,105	3.105	132	11.9	579	1.627	189	0.531
Forfar	278,193	9,066	3.259	861	9.5	5,399	1.941	1,931	0.694
Perth	130,861	3,518	2.689	310	8.8	2,188	1.672	737	0.563
Fife	175,640	5,633	3.207	356	6.3	3,217	1.832	1,144	0.651
Kinross	7,148	196	2.742	21	10.7	112	1.567	52	0.727
Clackmannan	24,640	805	3.267	47	5.8	401	1.627	142	0.576
Stirling	111,509	3,828	3.433	269	7.0	2,046	1.835	703	0.630
Dumbarton	84,699	2,932	3.462	157	5.4	1,528	1.804	512	0.604
Argyll	81,126	2,091	2.577	145	6.9	1,379	1.700	338	0.417
Bute	17,858	446	2.497	31	7.0	368	2.061	90	0.504
Renfrew	236,046	8,701	3.686	491	5.6	5,126	2.172	1,697	0.719
Ayr	222,979	7,744	3.473	552	7.1	4,202	1.884	1,500	0.673
Lanark	997,288	39,027	3.913	2,529	6.5	23,047	2.311	8,152	0.817
Linlithgow	44,901	1,918	4.260	130	6.8	868	1.933	286	0.637
Edinburgh	410,200	13,018	3.174	961	7.4	8,104	1.976	3,096	0.755
Haddington	38,762	1,098	2.833	91	8,3	696	1.796	207	0.534
Berwick	34,919	968	2.772	109	11,3	497	1.423	174	0.498
Peebles	14,203	388	2.732	30	7.7	212	1 493	73	0.514
Selkirk	28,981	877	3.026	79	9.0	449	1.549	108	0.373
Roxburgh	58,089	1,456	2.692	152	10.4	936	1.730	252	0.466
Dumfries	76,607	2,143	2.797	304	14.2	1,465	1.912	437	0.570
Kircudbright	42,356	1,160	2.739	175	15.1	684	1.615	226	0.534
Wigtown	38,401	1,080	2.812	173	16.0	692	1.802	204	0.531

In the year 1883, according to the registrar's return, 47 per cent. of the mothers who bore illegitimate children were in domestic service, 24 per cent. were factory workers, 10 per cent. were agricultural servants, 8 per cent. had no occupation, but were daughters of workingmen, 6 per cent. were seamstresses. Of nearly 4 per cent. no information is given on the point to the registrars, the mothers in most cases, however, being widows, while about 1 per cent. were the daughters of professional men. No information on the point is accessible in regard to any year subsequent to 1883. The probability, however, is that the percentage given for the latter year applies without considerable variation to the following as well as to preceding years. As a rule the fathers and mothers of illegitimate children in Scotland belong to the same classes of society, with a striking difference, however, in the case where the mothers belong to the class of domestic servants in towns.

The registrar-general of Scotland, in his report of 1871, the last one in which he investigates the causes of illegitimacy in the country, points out that in numerous instances the parents of these illegitimate children are true to each other, a woman having often several children by the same man, and that frequently these children are legitimized by subsequent marriage of the parents. The instances, as a rule, probably occur only when the parents are of the same rank, and most frequently among the rural laboring classes. In fact, an agricultural workingman would but exceptionally marry a woman with whom he had cohabited if the cohabitation had not resulted in the birth of a child or of children, one of his main objects in marrying being to raise children who may support him in his old age when he will be unable to earn enough, if anything, for his own support. The registrar-general, after further pointing out that no connection can be traced in Scotland between the proportion of illegitimate births and ignorance or want of instruction, that the percentage of such illegitimacy is independent of the proportion of the number of marriages in a district to the number of its inhabitants; that there is neither a traceable connection between illegitimacy and (1) the proportion of large farms to small holdings, nor (2) between illegitimacy and excess, wherever such exists, of females over males in the population, and that (3) the degree of house accommodation does not appear to perceptibly influence the percentage of illegitimate births, concludes this part of his report of 1871 with the remark: "It will thus be seen that we have not yet discovered the solution of the problem as to illigitimacy."

While dwelling on this subject I may add there are not in Scotland, as in at least some of the minor states of the Continent, legal regulations throwing obstacles in the way of the marriage of poor laboring people, and leading necessarily to illicit cohabitation and illegitimate births, nor has the Scottish clergy, for generations at least, failed to attack the evil of illegal sexual connection; and the extraordinary frequency of bastardy in some of the rural counties cannot therefore be ascribed even partly to any neglect of duty in this respect on their part, nor can the source of evil be found in a want of innocent amusements, as all classes of the people engage often and with zeal in a great variety of healthy and pleasant outdoor games, such as golfing, curling, foot-ball, cricket, and many others. As to none of the special causes or social conditions which elsewhere are productive of an exceptionally large percentage of bastardy can be traced, the proportion of illegitimacy existing, for example, in the agricultural counties of Banff, (16.1 per cent.), Wigtown (16 per cent.), Kirkcudbright and Elgin (15.1 per cent. each), there seems to be but one hypothesis capable of accounting for it, and that is, that this illegitimacy does not present at all a case of true demoralization, *i. e.*, degradation from a higher moral plane, consciousness of moral guilt, or loss of self-respect, but one of an early arrested moral development in this special direction for, generally speaking, the Scottish people compare, from a moral point of view, favorably with other nations. From statistical records this hypothesis can indeed derive no support, because in preceding ages no such records were kept, but from occasional allusions in older writers and from oral tradition we may gather that illegitimacy in the above and other counties must always have been very numerous; and I am informed that the records of the kirk sessions justify the conclusion that in the matter of illegitimacy preceding generations could have had no claim to superiority over the people of our own times. In cases where parents of illegitimate children subsequently marry each other, they very generally remain faithful to their marital obligations, and little, if any, blame attaches in public opinion to the mother. The crimes of abortion and infanticide, rarely committed anywhere in Scotland, are, as may naturally be expected under the circumstances, almost unknown in the agricultural districts referred to.

Criminal statistics, if they were collected by the authorities, would throw much light upon the moral condition of the people. Such, however, is not the case in Scotland, and, though the work might be done by private individuals, the pecuniary expenses of it would be very large indeed. But this much is certain, that, with a steadily increasing population, the number of severe sentences pronounced by the courts and the number of convicts in the penitentiary have during the last fifty years rapidly and steadily declined; a fact attributable to the gradual growth of a more humane sentiment, as well in the nation at large, inclining a smaller number of individuals to commit atrocious crimes, as in the judges and legislators, inclining them in turn to milder sentences and a milder criminal legislation.

CONDITION OF WORKINGMEN.

Concerning the capability of the Scottish artisan operative in factories or agricultural laborer for the work he has to perform, it may be, I think, justly said, that while he as a rule does not accomplish as much work within the same number of hours as his American colleague, nor thinks as constantly or intently about ways of improving and better adapting his tools to the work he has to execute with them, in order to make his labor easier to himself or to increase his products, he undoubtedly is superior in these respects to Englishmen of the same class.

The Scottish workingman cannot at all be called stolid, as the English workingman is; on the contrary, he is of a rather active, inquiring, and combining turn of mind, the result, in part at least, of the manner in which the reformation in his country was commenced and carried through, and the peculiar ecclesiastical and social spirit and organization engendered by it. Those Scottish mechanics and factory operatives who in early youth emigrate to the United States acquire in their new and stimulating surroundings in the course of a few years many of the qualities above alluded to as characteristic of American workingmen.

The growth of prosperity among laboring men during the last 30 years may reasonably be inferred from the fact that the large increase of the population of Scotland during that time has been accompanied by actual decrease in the number of persons receiving parochial relief as paupers.

The following table, marked H, showing the progress of business of the Edinburgh and Leith Savings Bank, points to the same conclusion, of an increasing prosperity of the workingmen, 90 per cent. of the depositors of the bank belonging to this class.

TABLE H.—*Progress of business of the Edinburgh and Leith Savings Bank.*

Year.	No. of transactions.	New accounts.	Open deposit accounts.	Population—census taken decennially only.	Percentage of the number of depositors to population.	Percentage of amount deposited to population.
1850	78,127	4,902	25,542	191,221	13.36	72.28
1855	87,566	5,345	26,887	....	....	....
1860	107,858	6,483	29,481	201,749	14.62	107.31
1865	119,038	6,450	34,758	....	....	....
1870	149,445	9,105	39,846	241,259	16.47	118.96
1875	184,940	9,776	49,031	....	....	....
1880	215,987	10,171	55,690	289,561	19.17	143.00
1885	239,172	9,205	60,625	....	....	....
1886	238,782	9,379	61,257	*324,920	18.84	155.76

TABLE H.—*Progress of business of the Edinburgh and Leith Savings Bank*—Continued.

Year.	Amount deposited.			Amount repaid.			Total funds.			Average amount deposited.
	£	s.	d.	£	s.	d.	£	s.	d.	
1850	188,279	19	6	131,781	9	10	299,940	7	2	£5.41
1855	165,800	19	0	156,817	10	9	482,970	4	1	....
1860	216,612	4	6	184,840	10	9	545,294	4	1	7.34
1865	209,705	1	11	229,071	11	0	605,329	11	5	....
1870	286,945	11	6	254,680	0	6	760,065	2	8	7.20
1875	359,276	19	5	3 '7,259	18	2	1,000,445	8	8	....
1880	414,090	1	0	400,139	11	7	1,263,085	9	8	7.43
1885	491,616	16	4	474,364	5	11	1,477,685	2	11	....
1886	506,303	16	0	429,963	12	1	1,531,705	3	8	8.26

*Population estimated to middle of year 1886.

That the workingmen are better off now than formerly is indeed generally admitted; but there is some difference of opinion amongst competent judges as to the degree in which their well-being has been increased. However, from inquiries I have made, I believe I am quite safe in saying that their condition has improved at least 30 per cent., making allowance for the, on the whole, probably slightly increased cost of living.

There is a unanimous concurrence of opinion to the effect that workingmen are very much better housed, clothed, and fed than they were some thirty years ago.

Relating to the condition, past and present, of the class of manual laborers in Great Britain, I insert the following extract of a lately published letter by Mr. J. Bright:

> Let your workmen (says Mr. Bright) reflect on the change in their condition which free trade has made within the last forty years since the reform of our tariff. The corn law was intended to keep wheat at the price of 80*s*. the quarter; it is now under 40*s*. the quarter. The price of tea is now less than the duty which was paid upon it in former days; sugar is not more than one-third of its cost when a monopoly of East and West India sugar existed. As to wages in Lancashire and Yorkshire, the weekly income of the thousands of workers in factories is nearly, if not quite, double that paid before the time when free trade was established. The wages of domestic servants in the county from which I come are in most cases doubled since that time. A working brick-setter told me lately that his wages are now 7*s*. 6*d*. per day; formerly he worked at the rate of 4*s*. per day. Some weeks ago I asked an eminent upholsterer in a great town in Scotland what had been the change in wages in his trade. He said that thirty or forty years ago he paid a cabinet-maker 12*s*. per week; he now pays him 28*s*. per week. If you inquire as to the wages of farm laborers you will find them doubled, or nearly doubled, in some counties, and generally over the whole country advanced more than 50 per cent., or one-half, while the price of food and the hours of labor have diminished.

For information on the manner and expenses of living at the present time of operatives in factories I refer to page 334; of miners, to page 340; and of agricultural laborers, to pages 341 and 342 of No. 71 of Consular Reports, published by the Department, containing a report from me on the elements of cost of certain articles.

INCOME AND EXPENDITURES.

The following example show the general mode of life, income and expenses, first, of a married journeyman tailor; and second, of a married journeymen shoemaker, each of them possessing average skill in the occupation he follows, and industrious habits:

MARRIED JOURNEYMAN TAILOR.

House, and expenses of house.

Man and wife and family of, say, three children live in third flat. They occupy one room, a kitchen and bed recess. The size of room is 16 by 14 feet. The room is plainly carpeted. Furniture consists of a table, a few chairs, a chest of drawers, sofa, a bed for the parents and a cot or small bed for the children. The furnishing of the house, including, besides the articles named, kitchen utensils, costs about £40. House rent, £8 15*s*. per annum.

Breakfast consists of tea and bread and butter for the parents, porridge for the children. Dinner: Principally broth, and beef boiled in it, potatoes; occasionally stewed steak or mutton in lieu of beef. Tea in the afternoon. Supper: Bread and butter, sometimes porridge.

Clothing and the cost thereof per year.

			£	*s.*	*d.*
Man.—1 suit clothes, £2 10*s*.; 1 flannel shirt, 5*s*. 6*d*; 1 cotton shirt, 2*s*. 6*d*.; 1 pair flannel drawers, 5*s*. 6*d*.; 2 pairs socks, 2*s*. 6*d*.; 3 day shirts in two years, 12*s*.; per year, 6*s*.; hat, 4*s*. 6*d*.; 1 pair boots, 15*s*			4	11	6
Wife.—Dress, £2; mantle or jacket, £1 10*s*.; bonnet, 10*s*.; gloves, 3*s*.; 2 pairs boots in 3 years, 11*s*. per year, 3*s*. 8*d*			4	6	8
Childrens dress, complete, £2 5*s*.; 3 pairs boots per year, at 4*s*., 12*d*			2	17	0
Medical attendance				15	0
School fees and books for two children, about			1	0	0
Commodities used per week:	*s.*	*d.*			
Beef, 4½ pounds	4	1½			
Tea, ½ pound		9			
Sugar, 3 pounds		6			
Bread, 6 loaves	3	0			
Milk	1	10			
Potatoes, 1 peck		8			
Oatmeal, ½ peck		3½			
Eggs, 1 dozen		10			
Ham, ½ pound		6			
Cheese, 1 pound		6			
Butter, ¾ pound		9			
Jam		3½			
Soap and powder		6			
Vegetables		4			
Coals, &c	1	0			
Total per week	15,	10½			
Or per year			41	5	6
House rent	£8	15			
Burgh assessments	13				
Poor rates	5	5			
School rates	2	11			
Cost of lighting (gas)	1				
Sundries, say	2				
			12	16	4
Total per year			67	12	0

The wages received average 27*s*. per week, or per year £70 4*s*. The wife does not contribute by her earnings to the house expenses of the family, her time being fully occupied by her attendance to household duties.

Married couples without family usually have two lodgers occupying the single room with bed, the husband and wife living in kitchen; 3*s*. 6*d*. to 5*s*. per week is received for each lodger.

About 65 per cent. of journeymen tailors are married men.

Of the unmarried tailors it may be said that generally two live in one room, at a rent of 3*s*. 6*d*. to 5*s*. each. Cost of their food and lodgings averages about 12*s*. 6*d*. or 13*s*.

There are many tailors, married and unmarried, who are not steady or of regular habits, and who are most unsteady on occasions when they could make most money. The families of the married men of this class suffer accordingly in the want of adequate food, clothing, and education. The wife in such cases has often to go out to do washing and charing in order to meet the requirements of her family.

The proportion of such men amongst journeymen tailors is small, compared with what it was thirty years ago, and is always becoming less. The proportion now is from 30 to 40 per cent.

MARRIED JOURNEYMAN SHOEMAKER.

House and expenses of house of married journeyman shoemaker and his wife and family of, say, two children.

The room and kitchen each contain on an average 1,200 cubic feet of space, say 12 by 12 feet and 10 feet to ceiling. The room furniture consists chiefly of table, four or five chairs, chest of drawers, carpet, bed, and pictures. The kitchen containing table, four or five chairs, dresser, bed, and clock; total cost, say £20. House rent £9 per annum.

Four meals daily are consumed, consisting of breakfast, dinner, tea, and supper. The breakfast is usually oatmeal porridge and milk, also a cup of tea or coffee, with bread and butter. When no porridge is taken ham and eggs, eggs, or fish substituted. Dinner, broth and beef, potatoes, otherwise beef and potatoes, or fish and potatoes, occasionally followed by pudding and milk. Tea in the afternoon, bread and butter, with occasionally cheese or preserves. Supper, cup of coffee, cocoa, or glass of beer, with bread and butter.

Clothing and its cost.

	£	s.	d.	£	s.	d.
Man.—One suit clothes, £2 10*s.*; one shirt, 3*s.*; knitted undershirt, 4*s.* 6*d.*; knitted drawers, 3*s.*; two pairs socks, 4*s.*; one pair boots, 12*s.*; hat, 4*s.* 6*d.*				4	1	0
Wife.—Dress, £2; mantle or jacket, 25*s.*; bonnet, 10*s.*; underclothing, 5*s.*; two pairs stockings, 4*s.*; gloves, 3*s.*; one pair boots, 10*s.*				4	17	0
Children.—Dress, complete, 30*s.*; 2 pairs boots, 12*s.*; underclothing, 5*s.*; 4 pairs stockings, 4*s*				2	11	0
All socks and stockings wife's own knitting.						
Physician's fees				1	00	0
Commodities used, per week:		s.	d.			
Bread, 3 loaves		1	6			
Butter, 1½ pounds		1	6			
Beef, 6 pounds		4	6			
Cheese, 1 pound			6			
Oatmeal, 3 pounds			6			
Milk, 2 pints per day		2	4			
Potatoes, 1 peck			6			
Vegetables			6			
Tea, ¼ pound		1	0			
Sugar, 3 pounds			7½			
Coffee or cocoa, ¼ pound			8			
Total per week		14	1½			
Or per year				36	14	6
	£	s.	d.			
House rent	9	00	0			
Burgh assessments		13	6			
Poor's rates		5	7			
School rate		3	0			
Light, gas	1	00	0			
Fuel, coal, firewood, &c	3	05	0			
Sundries, 2*s.* per week	5	04	0			
				19	11	1
Total per year				68	14	7

The average wages—piece-work regulated by an agreement between master and workmen—25*s.* to 30*s.* per week, £65 to £78 per year.

The income is in some cases augmented by keeping lodgers, from each of whom the sum of 3*s.* per week is received.

The unmarried journeymen shoemakers' expenses for board and lodgings vary from 10*s.* to 15*s.* per week.

MANNER OF LIVING.

The houses in which journeymen shoemakers and other journeymen mechanics are living in large towns like Edinburgh are mostly built in the form of tenements, four stories high, entered by common staircases leading to each flat. Such a flat contains from two to four separate dwelling-places called houses, each house usually containing from two to four rooms. In old houses generally one W. C. serves each flat, but in the newer tenements every dwelling house has such accommodation. Those tenements contain tradesmen of every grade. Shoemakers are found on all the flats; generally they prefer the uppermost flat so as to secure the best light, as many work in their own houses. The shoemaker's house usually consists of two rooms; many are content with one room, and a few have three or more rooms. It is also customary for one shoemaker to rent a large room and relet it to mates for seat room at *6d.* or *9d.* per week, which is much taken advantage of by unmarried men and by some married men.

A general description of the manner of living of master mechanics can hardly be given on account of the very great difference of their degree of prosperity, the poorest being obliged to live on the bare necessaries of life, while the most successful ones live surrounded by all the comforts and luxuries which moderate wealth usually procures. Between these extremes there exists of course a great variety in the manner of living.

VALUE OF EMIGRANTS.

No criminals or insane persons are sent from this district to the United States. Nor have persons receiving parochial relief of late years been induced to emigrate; although up to about ten years ago paupers for whom relatives living in the United States had bought and forwarded passage tickets were occasionally so far assisted by poorhouse boards as to receive an outfit consisting of a kit for the voyage and some wearing apparel.

Considering the kind of persons emigrating from this district, and indeed from Scotland at large, I am of the opinion that they cannot fail to become a valuable addition to the population of any new country they may settle in, and this opinion is in no manner modified by the circumstance that these emigrants are not easily influenced by the doctrines of communists or so-called socialists.

COLONIAL ENCOURAGEMENT.

The value placed on emigrants from Great Britain has induced several of her colonies to offer assistance to emigrants to their shores in the shape of paying part of their passage money. Thus the Dominion of Canada grants assisted steerage passage to Quebec and Halifax at the following rates, to—

		£	*s.*	*d.*
Agricultural laborers	each..	3	0	0
Wives of agricultural laborers	do....	3	0	0
Children of agricultural laborers:				
Under 12 years	do....	1	10	0
Under 12 months	do....	0	10	0
Female domestic servants	do....	3	0	0

These rates (which vary from time to time according to the ordinary rates in operation) include food and sleeping accommodation on board ship.

The colony of Queensland grants free passages to single female domestic servants and to agricultural labors from seventeen to thirty-five years of age. (These laborers are specially selected in the country districts, and their free passes are all taken up for some time to come.) Besides, persons who have resided in the colony for six months can nominate others, who have been duly proved to be their relatives or friends, for free passages upon the following payments being made in the colony:

Sex.	1 to 12 years.	12 to 40 years.	40 to 55 years.
Male	£1	£2	£4
Female	1	1	4

The nominee must not be over fifty-five years of age. Artisans and mechanics are not eligible for nomination except by special permission of the colonial government.

The colony of Western Australia grants assisted passages at present only to farmers, agriculturists, millers, wheelwrights, and others likely to be useful in country districts, and they must be possessed of some small capital, the amount to be decided in each case by the Crown agents for the colony. As a rule, a married couple will be required to deposit not less than £100, and £25 for each child over twelve years old. The deposit is repaid immediately after their arrival in the colony.

In addition to the above, the Western Australia Land Company are under contract with the colonial government to introduce into the colony a limited number of assisted emigrants belonging to the following classes: Farm laborers, brickmakers, and quarrymen, under forty-five years of age, married couples with their children being preferred. The rates by steamer are fixed at £7 per adult, including £1 for ship's kit; children under twelve years, half price. Number so assisted will not exceed 1,000 per annum.

The colony also grants a limited number of free passages to emigrants nominated to the immigration board by residents in the colony.

Tasmania.—This colony assists immigrants only in the shape of so-called "nominated passages." Residents may nominate their friends in Great Britain at one of the immigration offices in the colony and paying at the same time the following sums: Adult males, not over forty years old, £5 for each person; adult female, same age, £3; married couples not above forty-five years, £6; children between the ages of three and twelve taken at half price; children under three, accompanied by their parents, free. Emigrants nominated in the colony must be approved by the colonial agent-general in London and selected only from the classes of agriculturists, laborers, and domestic servants.

New Zealand.—The agent-general for the company in London will entertain applications for assisted passages for a limited number of farmers and agriculturists, possessed of small capital and intending to take up land in the colony, at the following rates, namely, £10 for each adult and £5 for each child between the ages of one and twelve years. Each head must prove to the satisfaction of the agent-general that he is possessed of the sum of £100 in cash, and, besides, of £50 for each of his children over twelve years of age. Persons living in the colony may also nominate their friends in the United Kingdom for assisted passages, but, as a rule, nominations will only be accepted for agricultural laborers and female unmarried domestic servants.

When the colony of Queensland and one or two other colonies, copying her methods, first began the system of subsidizing emigrants, the assistance was given in a rather indiscriminate manner. In consequence thereof and at an extravagant expense to these colonies their towns were soon overcrowded with people unable to find employment and much suffering and dissatisfaction has been the result.

At the present time greater care is taken in the selection of emigrants; a greater preference is given to those intending to take up land and to cultivate it, and though this change in the selection of emigrants has much diminished the annual accession to the population of the colonies concerned, it has turned out to be a more prudent system than the one formerly pursued.

That the several colonial systems of attracting immigration have to some extent been successful cannot be denied, yet their success has scarcely been such as to justify the expectation of seeing any really great stream of emigration, which otherwise would have gone to other countries, diverted to colonial shores.

Another plan of directing British emigration to the colonies holding out prospects of much greater success is that proposed by the National Association for State-directed Emigration. This plan is likely to be adopted. It is in its main features supported by great numbers of persons in Great Britain as well as in the colonies, distinguished in politics, industry, or commerce. The object of the plan is to secure the carrying out of a systematic emigration of British subjects to British colonies only, and on a self-supporting footing. The plan may be summarized thus:

(1) The Imperial Government to create a permanent colonization board, the representatives in London of co-operating colonies to sit ex-officio on the board. The board to be responsible to Her Majesty's secretary for the colonies.

(2) The Imperial Government to provide the necessary funds by securing a public loan at 2 per cent. or 2½ per cent. interest.

(3) The co-operating colonies to place in the hands of the board tracts of public lands for colonization purposes.

(4) Emigrants to be of two classes: the first to be sent only to colonies where their labor is admittedly in demand; the second class to be planted as farmers on the lands placed in the hands of the board.

(5) Pioneer parties to clear and prepare lands, erect houses, &c., for the farmer emigrants to follow after them. Farmer emigrants found, after arrival, to be inexperienced, to be placed for a time with a pioneer party.

(6) People so settled on farming land to repay after first or second crop in, say, ten annual instalments the cost of their settlement, with interest at 4 per cent. per annum and 4 to 5 per cent. for administration expenses.

The estimated average cost of conveyance of a family (man, wife, and three children) and their maintenance until after arrival of first crop is: For Canada, £100 to £110; for Australia, New Zealand, or Tasmania, £150; for the Cape and Natal, £120 to £130. This is on the assumption that a free railway pass is given from the place of landing to the nearest point to the settlement. The railways in most colonies are property of the government.

No efforts should be made to supersede any existing arrangements between colonial authorities and shipping agents.

(7) Colonial governments should nominate for each settlement an experienced colonist as superintendent of the settlement, whose services should be retained as long as necessary.

It is estimated that £2,000,000 would be required the first year and £1,000,000 the second year, and that no further amounts would be required. The whole of these sums to be exclusively devoted to the cost of emigration and colonization, and no part thereof to be used for administrative expenses.

The plan above outlined will, if carried out, benefit greatly and more particularly the large class of poor agricultural laborers of late years thrown out of employment by the rapid introduction of agricultural machinery, and the consolidation of small farms into larger farms. Such consolidation has not, however, taken place to any extent in this consular district. This class also is by training and acquired habits well adapted to form successful farming settlements and to contribute to a healthy growth of the colonies in which they may be planted. But, while this is true, such assisted agricultural emigrants or other assisted emigrants are probably not quite as desirable an addition to the population of new countries as those who defray the expenses of their emigration themselves.

The cause of emigration from Great Britain is to be found in the fact that the country has arrived at a point of economical development where it has produced and continues to produce a surplus even greater of labor than of capital, for which it can find no profitable, or not as profitable, employment at home as in other countries. Both, therefore, surplus labor as well as capital, are transferred to markets where they can be invested to greater advantage.

OSCAR MALMROS,
Consul.

UNITED STATES CONSULATE,
Leith, March 16, 1887.

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FISHERY INTERESTS OF THE UNITED STATES AND TRADE WITH CANADA.

REPORTS

FROM THE

CONSULS OF THE UNITED STATES.

No. 77.—APRIL, 1887.

DEPARTMENT OF STATE
UNITED STATES OF AMERICA.

213

WASHINGTON:
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COMMERCE, MANUFACTURES, ETC.

No. 77.—April, 1887.

NOTE.

The following tables were printed in the Quarterly Report of the Chief of the Bureau of Statistics, Treasury Department, No. 2, 1886–'87. As the subjects to which they relate are of general interest, it has been deemed proper to issue the tables in the consular numbers, and this the Department is enabled to do through the courtesy of the Bureau of Statistics, Treasury Department.

FISH AND FISHERY PRODUCTS.

No. 51.—STATEMENT showing the KINDS, QUANTITIES, and VALUES of FISH and of WHALE and FISH OIL IMPORTED into the United States during each Year from 1821 to 1853, inclusive.

YEARS ENDING—	FISH, DRIED, SMOKED, OR PICKLED.										WHALE AND FISH OIL.		VALUE IMPORTED FROM—		
	Dried or smoked.		PICKLED.										All foreign countries.	British N. Am. Poss.	All other countries.
			Salmon.		Mackerel.		Herring and shad.		All other fish.						
	Cwts.(a)	*Dollars.*	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars.*	*Gallons.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Sept. 30, 1821	346	....	1,048	....	7	....	(b)	....	116	....	418	....	c13,186	12,223	963
1822	712	....	1,244	....	887	....	(b)	....	95	....	1,194	....	c19,255	18,831	424
1823	2,969	....	1,507	....	67	....	(b)	....	268	....	2,231	....	c31,914	30,466	1,448
1824	1,144	....	4,574	....	790	....	(b)	....	651	....	786	....	c43,411	42,968	443
1825	1,628	....	1,540	....	242	....	(b)	....	778	....	200	....	c29,500	29,337	163
1826	757	....	1,013	....	87	....	(b)	....	242	....	194	....	c18,841	18,649	192
1827	685	....	1,540	....	39	....	(b)	....	101	....	238	....	c24,971	24,537	434
1828	434	....	730	....	88	....	(b)	....	187	....	4,009	....	c10,469	9,944	525
1829	492	....	699	....	95	....	(b)	....	188	....	1,372	....	c16,182	15,343	839
1830	351	....	1,621	....	391	....	(b)	....	715	....	96	....	c27,624	27,001	623
1831	1,363	....	2,315	....	4,552	....	(b)	....	454	....	456	....	c49,421	47,686	1,735
1832	1,859	....	2,104	....	32	....	(b)	....	264	....	421	....	c28,584	28,318	266
1833	6,068	....	1,652	....	20	....	(b)	....	840	....	6,571	....	c45,649	42,714	2,935
1834	824	7,795	2,009	22,616	223	691	(b)	(b)	1,515	11,838	34	15	42,955	35,562	7,393
1835	1,379	13,425	2,546	28,606	8,153	29,316	(b)	(b)	3,144	15,435	4,088	1,497	88,279	82,172	6,107
1836	1,872	12,178	2,976	35,884	6,037	36,470	(b)	(b)	5,094	30,774	1,421	588	115,894	90,611	25,283
1837	2,043	13,528	3,543	50,035	1,256	9,089	(b)	(b)	3,111	24,828	767	564	98,044	84,081	13,903
1838	2,015	14,111	3,790	58,791	182	1,595	(b)	(b)	3,521	21,775	781	299	96,571	90,364	6,207
1839	4,295	24,303	5,338	73,768	7,046	60,374	(b)	(b)	14,489	71,489	d400,151	d112,821	342,755	219,934	122,821
1840	4,061	19,355	4,860	78,232	11,823	114,590	(b)	(b)	8,810	48,979	87,236	14,196	275,352	257,881	17,471
1841	2,433	19,262	4,951	72,317	10,887	116,459	(b)	(b)	2,175	14,149	6,705	2,849	225,036	215,029	10,007
1842	1,265	5,186	4,693	54,679	8,194	58,812	(b)	(b)	1,791	8,754	3,573	1,102	128,533	122,767	5,766
June 30, 1843 (nine months)	188	1,411	2,640	26,993	12,334	57,457	e399	e2,048	1,391	3,704	771	258	91,871	89,183	2,688
1844	360	3,007	(b)	(b)	(b)	(b)	(b)	(b)	43,542	261,013	297	147	264,227	261,349	2,878
1845	1,297	9,646	(b)	(b)	(b)	(b)	(b)	(b)	30,506	280,519	(f)	(f)	290,165	283,178	6,987
1846	875	9,319	(b)	(b)	(b)	(b)	(b)	(b)	31,402	279,515	(f)	(f)	288,834	284,584	4,250
1847	8,274	25,711	(b)	(b)	(b)	(b)	(b)	(b)	91,118	452,357	11,706	3,539	481,607	470,107	11,500
1848	51,826	127,799	7,633	80,944	122,594	535,128	(b)	(b)	23,344	71,774	84,077	16,863	832,508	816,687	15,821
1849	22,520	43,709	8,244	81,200	138,505	465,286	13,961	29,761	5,363	13,097	39,609	12,864	645,917	615,554	30,363
1850	25,115	45,961	8,721	85,447	75,491	335,736	10,868	37,037	13,300	38,451	44,765	18,493	561,125	522,942	38,183
1851	14,705	27,769	7,964	85,705	102,638	549,525	21,714	54,449	21,016	64,022	8,220	1,281	782,751	765,489	17,262
1852	49,299	55,171	7,947	96 526	78,334	327,613	26,696	73,584	20,083	65,993	8,803	3,847	622,734	608,534	19,200
1853	97,507	214,016	7,235	94,341	54,411	329,233	66,584	159,027	31,153	90,143	g541,332	g255,781	1,142,541	1,071,243	71,298

NOTE.—The statistics of imports into the United States include the products of the American whale fisheries.

a From 1821 to 1842, inclusive, "quintals." *b* Included under "All other pickled fish." *c* Exclusive of whale and fish oil, the value of which cannot be stated. *d* Gallons 396.403, $111,166 from South Seas and Pacific Ocean. *e* Herring only, shad being included under "All other pickled fish." *f* Not stated. *g* Gallons 487,829, $225,795 from British North American Possessions.

No. 52.—**STATEMENT** showing the **QUANTITIES** and **VALUES** of **FISH** and **FISHERY PRODUCTS IMPORTED** into the United States, distinguishing between **IMPORTS** free of duty under Reciprocity Treaty of June 5, 1854, and **IMPORTS** other than under said treaty, from 1854 to 1868, inclusive.*a*

YEAR ENDING JUNE 30—	IMPORTS, DUTIABLE, NOT UNDER RECIPROCITY TREATY.															
	Herring.		Mackerel.		Salmon.		Fish, dried or smoked.		All other fish in barrels.		All other fish not in barrels.		Whale and other fish oil.		Sardines, in oil.	TOTAL IMPORTS NOT UNDER RECIPROCITY TREATY.
	Barrels.	*Dollars.*	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars.*	*Cwts.*	*Dollars.*	*Barrels.*	*Dollars.*	*Pounds.*	*Dollars.*	*Gallons.*	*Dollars.*	*Dollars.*	*Dollars.*
1854	*b*61, 485	158, 348	62, 490	477, 181	6, 810	94, 835	76, 074	181, 469	41, 652	149, 824	....	....	243, 334	116, 570	....	1, 177, 677
1855	*b*46, 902	129, 938	80, 990	432, 431	6, 316	85, 796	111, 913	265, 934	26, 050	86, 231	....	....	103, 844	36, 650	....	1, 036, 980
1856	*b*3, 587	22, 808	81	138	685	8, 106	65, 968	158, 233	454	2, 658	....	....	18, 430	8, 044	....	194, 987
1857	*b*8, 831	49, 213	20	144	700	3, 949	43, 994	96, 607	706	4, 633	....	....	36, 558	17, 603	....	172, 239
1858	3, 892	18, 905	45	369	337	2, 446	41, 151	111, 709	980	5, 209	....	....	37, 437	18, 627	274, 137	431, 402
1859	*b*7, 756	39, 001	5, 067	6, 661	1, 127	6, 763	40, 450	107, 015	1, 763	8, 673	....	....	7, 220	3, 504	251, 278	423, 495
1860	5, 489	38, 308	58	258	4	111	66, 417	149, 217	757	4, 900	....	....	185, 903	41, 903	299, 679	534, 466
1861	5, 053	28, 367	110	695	132	1, 110	53, 448	120, 462	941	6, 262	6, 650	271	73, 325	29, 662	226, 624	413, 453
1862	*c*3, 595	22, 400	....	....	*d*58	460	....	....	....	....	1, 152, 934	26, 747	26, 933	14, 428	186, 417	250, 452
1863	*c*3, 332	29, 037	....	....	*d*88	419	....	....	....	....	3, 071, 842	77, 343	42, 808	17, 184	383, 223	507, 206
1864	*c*4, 342	34, 569	....	....	*d*72	956	....	....	....	....	1, 702, 166	45, 262	34, 097	16, 970	504, 079	601, 836
1865	4, 107	38, 394	10	152	18	188	....	....	11	238	740, 973	20, 364	*e*11, 397	6, 427	304, 713	870, 476
1866	8, 842	81, 761	5, 312	48, 121	786	4, 817	....	....	6, 435	30, 423	4, 252, 948	103, 419	*e*178, 496	117, 409	937, 920	1, 323, 370
1867	102, 929	396, 948	77, 503	675, 986	6, 670	129. 051	....	....	24, 861	154, 940	11, 345, 975	311, 349	300, 152	183, 184	478, 619	2. 330, 077
1868	62, 659	291, 435	41, 656	364, 439	6, 546	90, 287	....	....	1, 4247	65, 441	10, 498, 543	306, 948	125, 906	68, 509	471, 707	1, 658, 766

a Products of American fisheries not included. *b* Including shad. *c* Including mackerel. *d* Including all other in barrels. *e* Including seal oil.

No. 52.—QUANTITIES and VALUES of FISH and FISHERY PRODUCTS IMPORTED into the United States from 1854 to 1868, inclusive *a*—Continued.

YEAR ENDING JUNE 30—	IMPORTS, FREE OF DUTY, FROM BRITISH AMERICAN PROVINCES, UNDER THE PROVISIONS OF THE RECIPROCITY TREATY WITH GREAT BRITAIN, OF JUNE 5, 1854.												TOTAL FREE AND DUTIABLE.
	Fish, dried or smoked.		Fish, pickled.		All other fish in barrels.		Fish of all kinds not in barrels.		Whale and fish oil.		Other products of fisheries.	TOTAL IMPORTS UNDER RECIPROCITY TREATY.	
	Barrels.	*Dollars.*	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars.*	*Pounds.*	*Dollars.*	*Gallons.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1854													1,177,077
1855 *b*			1,038	5,582			256,892	6,211	1,458	932	5,408	18,133	1,055,113
1856			240,585	1,336,268			19,569,744	528,788	249,189	179,346	29,705	2,074,197	2,269,184
1857			226,064	1,162,933			13,289,717	470,416	364,888	275,182	62,365	1,970,896	2,143,135
1858			235,096	1,172,916			10,446,069	341,855	269,050	160,607	182,898	1,858,276	2,289,678
1859			278,774	1,328,969			15,244,423	422,505	558,350	314,830	156,559	2,222,863	2,646,358
1860			301,917	1,389,852			8,847,099	313,491	428,660	230,598	256,417	2,190,356	2,724,824
1861	*c*3,492,837	100,268	202,976	945,603			10,085,050	314,933	245,236	131,816	305,192	1,797,812	2,211,265
1862	*c*325,472	4,835	179,076	678,093	4,386	6,263	4,444,275	132,502	110,665	64,106	192,272	1,078,072	1,328,535
1863	5,475	26,002	94,220	384,011	31,447	83,618	4,872,952	144,305	206,124	120,617	108,613	957,166	1,464,372
1864	7,533	6,054	152,327	781,090	51,233	50,467	6,141,306	234,126	90,570	74,070	331,348	1,477,155	2,078,901
1865	9,789	18,787	241,412	1,510,257	45,691	71,782	3,914,007	197,932	37,766	23,538	391,088	2,213,384	2,583,860
1866 *d*	(*e*)	28,784	(*e*)	1,527,352	(*e*)	28,062	(*e*)	326,715	(*e*)	341,613	799,213	3,051,739	4,375,109
1867													2,330,077
1868													1,658,766

a Products of American fisheries not included.

b Half year ended June 30, 1855.

c Pounds.

d July 1, 1865, to March 17, 1866.

e Quantities not stated in returns of collectors of customs.

No. 53.—STATEMENT showing the QUANTITIES and VALUES of FOREIGN FISH and FISHERY PRODUCTS EXPORTED from the United States, from 1854 to 1868, inclusive.

YEAR ENDING JUNE 30—	Herring.		Mackerel.		Salmon.		Fish dried or smoked.		All other fish in barrels.		All other fish not in barrels.		Sardines in oil.	Whale and other fish oil.		TOTAL.
	Barrels.	*Dollars.*	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars.*	*Cwts.*	*Dollars.*	*Barrels.*	*Dollars.*	*Pounds.*	*Dollars.*	*Dollars.*	*Gallons.*	*Dollars.*	*Dollars.*
1854	*a*12, 150	48, 774	13, 898	95, 479	219	2, 967	50, 207	171, 975	8, 970	39, 718				37, 836	22, 836	361, 740
1855	*a*1, 880	7, 300	14, 556	83, 156	334	4, 704	51, 180	191, 322	17, 942	64, 199				4, 215	3, 469	354, 150
1856	*a*10	45	9, 374	50, 035	141	2, 027	42, 985	170, 841	11, 003	48, 929				12, 843	7, 626	279, 503
1857	*a*106	962	6, 897	48, 770	75	600	44, 405	152, 689	12, 608	59, 564				908	1, 410	263, 995
1858	1, 156	4, 153	3, 130	26, 009	363	2, 799	31, 390	113, 504	15, 288	71, 098			11, 618	4, 950	5, 518	234, 759
1859	1, 202	3, 816	2, 717	20, 920	714	4, 118	32, 844	122, 446	8, 824	34, 340			6, 405	11, 169	8, 501	200, 606
1860	1, 810	5, 557	1, 100	7, 291	40	450	40, 143	142, 805	8, 225	37, 102			10, 101	128, 948	89, 876	293, 182
1861	*a*3, 868	14, 982	2, 321	15, 171	30	130	33, 453	109, 807	5, 138	23, 710	184, 585	6, 183	13, 036	4, 630	5, 989	189, 098
1862	15	78	700	3, 448					912	4, 714	1, 028, 150	31, 934	8, 328	46, 508	7, 579	56, 076
1863			300	1. 840					301	1, 372	2, 764, 280	113, 688	11, 870	4, 981	2, 740	131, 710
1864											1, 416, 757	79, 175	16, 747	21, 723	24, 753	120, 675
1865	40	246									687, 691	54, 547	40, 780	34, 491	48, 577	144, 150
1866	2, 432	13, 138	615	7, 872	7	170					1, 436, 508	97, 514	10, 325			129, 019
1867	16, 938	104, 005	7, 807	89, 748	485	12, 844			2, 717	23, 446	3, 045, 994	171, 900	9, 067	36, 954	18, 941	429, 951
1868	12, 912	74, 909	7, 661	72, 783	172	2, 878			1, 944	15, 132	3, 841, 806	155, 932	16, 592	10, 512	15, 574	353, 800

a Including shad.

No. 54.—STATEMENT showing the QUANTITIES and VALUES of IMPORTED FISH and FISHERY PRODUCTS ENTERED for CONSUMPTION in the United States, together with the Rates and Amounts of Duty Collected thereon, from 1869 to 1886, inclusive.

YEAR ENDING JUNE 30—	HERRING.							MACKEREL.				
	Pickled.					Dried or smoked.						
	Free of duty under reciprocity treaty.		$1 per barrel.			Free of duty under reciprocity treaty.		Free of duty under reciprocity treaty.		$2 per barrel.		
	Quantities.	Values.	Quantities.	Values.	Duties.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Duties.
	Barrels.	*Dollars.*	*Barrels.*	*Dollars.*	*Dollars.*	*Boxes.*	*Dollars.*	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars.*	*Dollars.*
1869			91,567.50	425,212 90	91,567 50					27,480.87	306,695 57	54,937 75
1870			87,283.58	398,595 90	87,283 58					28,480.37	291,527 50	56,960 75
1871			62,021.90	356,759 69	62,021 91					28,478.50	309,074 65	56,975 02
1872			62,474.88	332,706 84	62,474 88					39,572.12	247,700 75	79,144 25
1873			63,497.50	352,235 49	63,497 50					70,651.35	523,577 25	141,302 70
1874	53,501.75	191,492 23	29,235.96	242,507 33	29,235 96	205,819	34,669 59	89,376.75	793,764 00	1,496.75	13,325 00	2,993 50
1875	77,917.75	300,406 03	20,272.87	216,567 00	20,272 87	309,549	63,223 45	78,091.25	586,825 00	41	524 00	82 00
1876	89,042	306,947 38	18,276.99	186,215 00	18,276 99	307,190	57,560 40	76,582.85	695,847 00	16	70 00	32 00
1877	61,791.50	207,090 55	14,907.06	190,431 00	14,907 66	316,570.50	39,459 42	44,109.50	373,792 38	8.50	105 00	17 00
1878	79,701.50	250,920 45	15,606.76	180,912 00	15,606 76	421,834	52,715 16	101,995	907,013 00	6	67 00	12 00
1879	57,810.50	193,276 25	19,226.10	190,218 00	19,226 10	382,471	46,974 78	101,450	650,048 13	2.63	19 05	5 25
1880	48,604	158,443 00	25,954.88	287,177 00	25,954 88	508,615	69,986 00	112,385.50	492,807 40	12	127 00	24 00
1881	63,497	231,285 40	30,489.60	288,056 25	30,489 60	676,843	92,604 00	120,352.50	615,003 10	8.50	98 50	17 00
1882	77,918	273,564 50	36,381.81	376,335 00	36,381 81	1,088,361	134,377 85	57,868.25	394,322 50			
1883	101,444.50	418,314 25	48,995.19	496,119 00	48,995 19	656,778	120,013 60	52,062	427,327 00	11.13	149 00	22 25
1884	126,492.50	492,409 54	38,526.47	484,406 00	38,526 47	a8,330,641	137,975 00	88,215	873,567 35	15.55	113 00	31 10
1885	134,730	314,551 20	49,088.09	543,697 68	49,088 09	ac10,441,355	129,084 46	92,125	701,930 00	21.75	100 00	43 50
1886			92,659.58	617,035 00	92,659 58	a4,246,970	b64,456 50			31,847.56	222,716 00	63,695 13

Pounds. *b* 50 cents per 100 pounds in 1866. Duty collected on quantity, $21,234.85.

No. 54.—QUANTITIES and VALUES of IMPORTED FISH and FISHERY PRODUCTS ENTERED for CONSUMPTION in the United States, &c., from 1869 to 1886, inclusive—Continued.

YEAR ENDING JUNE 30—	FRESH FISH, FOR DAILY CONSUMPTION.		FISH, IN OIL OR PRESERVED, NOT OTHERWISE SPECIFIED.		OTHER PICKLED, IN BARRELS.					OTHER, NOT IN BARRELS, SOLD BY WEIGHT.	
	Free of duty.		30 per cent.		Free of duty under reciprocity treaty.		$1.50 per barrel, 1869–1883; $2 per barrel, 1884–1886.			Free of duty under reciprocity treaty.	
	Quantities.	Values.	Values.	Duties.	Quantities.	Values.	Quantities.	Values.	Duties.	Quantities.	Values.
	Pounds.	*Dollars.*	*Dollars.*	*Dollars.*	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars.*	*Dollars.*	*Pounds.*	*Dollars.*
1869	....	....	30,861 24	9,258 37	....	....	9,732	65,538 95	14,598 00	....	....
1870	....	....	30,465 00	9,139 50	....	....	9,960.50	69,796 92	14,940 19	....	....
1871	....	84,742 59	34,173 23	10,251 97	....	....	7,002.75	52,704 50	10,504 13	....	....
1872	7,647,482	242,675 05	40,041 15	12,012 84	....	....	7,454.87	36,363 00	7,132 31	....	....
1873	8,386,624	279,819 70	27,175 01	8,153 11	....	....	4,555.16	31,683 10	6,832 75	....	....
1874	9,332,878	297,532 46	15,810 79	4,743 23	8,719	47,466 25	1,051.38	7,135 25	1,577 06	6,104,890	152,577 94
1875	14,887,205	346,315 00	27,117 20	8,135 16	8,694.50	50,172 00	698.67	4,701 15	1,048 00	7,747,452	241,035 00
1876	12,327,015	274,091 00	27,490 00	8,247 00	8,243	50,374 00	608.75	3,798 30	913 13	6,360,736	210,130 94
1877	13,453,033	315,858 10	15,996 00	4,798 80	16,004.25	90,796 00	885.25	2,458 00	577 88	5,061,597	229,780 00
1878	9,914,296	342,729 00	15,849 00	4,754 70	4,074.62	38,520 00	428	2,261 25	642 00	10,294,061	305,007 25
1879	7,949,063	283,734 42	13,835 00	4,150 50	6,839.50	43,497 00	335.50	1,786 00	503 25	11,446,022	353,330 41
1880	10,780,051	321,160 96	14,646 50	4,393 95	11,428.50	54,670 00	515.25	2,784 00	772 88	14,295,884	406,037 25
1881	13,066,101	376,722 34	21,056 12	6,316 83	13,485.50	61,081 00	2,352.58	14,168 05	3,528 88	22,409,945	647,436 00
1882	15,821,009	474,828 73	31,362 16	9,408 65	9,838	59,467 00	2,964	20,543 25	4,446 00	22,825,781	705,748 53
1883	15,860,390	572,533 25	24,271 89	7,281 57	13,835.50	85,766 54	3,701.25	26,694 00	5,551 88	24,234,780	1,023,568 00
1884	19,926,286	708,170 20	35,913 93	10 774 24	14,195.50	77,525 00	2,009.46	15,877 71	4,018 92	27,391,485	1,014,544 44
1885	19,651,561	736,764 50	22,387 39	6,716 21	10,978	46,524 00	2,011.46	14,411 00	4,022 91	32,755,845	965,997 50
1886	21,006,099	668,887 40	19,982 11	5,994 66	....	....	2,929.78	21,009 00	5,859 56	....	....

No. 54.—QUANTITIES and VALUES of IMPORTED FISH and FISHERY PRODUCTS ENTERED for CONSUMPTION in the United States, &c., from 1869 to 1886, inclusive—Continued.

YEAR ENDING JUNE 30—	OTHER, NOT IN BARRELS, SOLD BY WEIGHT.			OYSTERS, DRIED.		PREPARED, IN CANS.			SALMON, PICKLED.				
	50 cents per 100 pounds.			20 per cent.		Free of duty under reciprocity treaty.	35 per cent.		Free of duty under reciprocity treaty.		$3 per barrel, 1869-1883; $2 per barrel, 1884-1886.		
	Quantities.	Values.	Duties.	Values.	Duties.	Values.	Values.	Duties.	Quantities.	Values.	Quantities.	Values.	Duties.
	Pounds.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars.*	*Dollars.*
1869	8,943,818	287,934 45	44,716 59	....	....	....	2,457 00	859 95	....	....	8,454.75	110,591 00	25,364 25
1870	7,209,130	263,981 63	36,045 69	3,623 00	724 60	....	3,525 00	1,233 75	....	....	10,619.76	137,054 50	31,859 30
1871	6,762,520	249,690 78	33,812 61	4,260 00	852 00	....	6,610 88	2,313 81	....	....	9,356.05	145,264 10	28,068 15
1872	3,558,990	130,038 99	17,794 95	6,803 00	1,360 60	....	31,429 20	11,000 22	....	....	5,344.41	80,171 00	16,033 25
1873	5,128,404	190,692 88	25,642 05	7,590 00	1,518 00	....	57,183 20	19,996 62	....	....	4,578.50	73,230 75	13,735 50
1874	1,089,319	55,095 09	5,446 57	5,068 00	1,013 60	220,444 00	23,760 95	8,316 35	3,674.75	50,173 00	1,200.50	15,453 00	3,601 50
1875	479,420	34,457 93	2,397 10	8,237 00	1,647 40	368,216 20	20,931 00	7,325 85	4,730.25	61,583 00	81.50	1,357 00	244 50
1876	358,201	24,264 13	1,791 03	11,008 61	2,201 72	82,484 01	14,328 26	5,014 91	4,197	49,938 00	2.75	32 00	8 25
1877	690,856	48,352 72	3,454 32	13,447 00	2,689 40	19,223 76	7,271 69	2,545 10	5,437	61,724 00	.50	9 00	1 50
1878	785,188	50,261 85	3,925 95	8,127 00	1,625 40	20,731 21	4,335 72	1,517 51	8,423	107,399 00	173	1,010 00	519 00
1879	613,656	42,055 92	3,068 28	2,606 00	521 20	51,983 65	3,068 78	1,074 05	9,333.50	106,131 00	252.50	2,232 00	757 50
1880	645,869	38,222 15	3,229 35	8,846 90	1,769 38	82,238 79	4,495 15	1,573 81	8,231	118,104 00	26.50	155 00	79 50
1881	1,200,026	55,784 46	6,000 17	12,515 47	2,503 10	147,411 90	7,881 24	2,758 43	5,838.50	91,314 00	9	68 00	27 00
1882	1,364,770	78,318 70	6,823 85	21,942 28	4,388 46	313,458 00	11,806 34	4,132 22	4,626	85,078 00	125.25	1,400 00	375 75
1883	2,501,701	111,864 32	12,508 55	22,820 17	4,564 04	328,532 00	18,879 99	6,608 02	4,689	93,348 00	36	291 00	108 00
1884	3,341,276	126,505 86	16,706 38	....	....	207,445 15	39,437 54	9,859 38	6,403.50	100,508 00	43.38	438 00	86 75
1885	4,414,798	157,767 54	22,074 04	....	....	365,719 00	31,504 32	7,876 09	5,611.50	72,907 00	9.77	93 00	19 55
1886	16,400,410	460,090 71	82,002 14	....	....	252,054 00	52,063 02	13,015 75	....	....	4,397.55	46,073 00	8,795 10

No. 54.—QUANTITIES and VALUES of IMPORTED FISH and FISHERY PRODUCTS ENTERED for CONSUMPTION in the United States, &c., from 1869 to 1886, inclusive—Continued.

YEAR ENDING JUNE 30—	SALMON, DRIED OR SMOKED.		SARDINES AND ANCHOVIES, PREPARED IN OIL, OR OTHERWISE.							
			In all forms.		Whole boxes, 5 x 4 x 3½ inches.			Half boxes, 5 x 4 x 1⅝ inches.		
	Free of duty under reciprocity treaty.		50 per cent.		15 cents per box; 10 cents per box after 1883.			7½ cents per box; 5 cents per box after 1883.		
	Quantities.	Values.	Values.	Duties.	Quantities.	Values.	Duties.	Quantities.	Values.	Duties.
	Pounds.	*Dollars.*	*Dollars.*	*Dollars.*	*Boxes.*	*Dollars.*	*Dollars.*	*Boxes.*	*Dollars.*	*Dollars.*
1869			640,159 40	320,079 70						
1870			980,989 00	490,494 50						
1871			912,555 47	456,277 74						
1872			683,094 61	341,547 31						
1873			986,769 11	493,384 58						
1874		4,703 00	886,677 02	443,338 51						
1875	58,096.50	8,560 00	522,980 20	261,490 10	1,662	552 00	249 30	100,509	16,027 00	7,538 18
1876	9,240	970 00	53,790 00	26,895 00	5,382	2,253 00	807 30	412,874	64,885 00	30,928 06
1877	37,069	3,704 00	411 00	205 50	5,813	2,338 00	871 95	264,285	48,044 00	19,821 38
1878	9,354	1,082 00			7,182	2,615 00	1,077 30	184,539	35,801 00	13,840 43
1879	277,158	11,977 00			2,424	1,010 00	363 60	117,320	23,865 00	8,799 01
1880	132,775	4,785 00			4,792	1,805 00	718 80	263,728	52,548 50	19,779 60
1881	365	29 00			2,843	982 00	426 45	131,532.50	31,542 60	9,864 94
1882					2,554	1,351 00	383 10	54,340	13,434 60	8,850 50
1883	690,602	35,086 00			2,446	1,447 00	366 90	180,415	47,901 00	13,531 13
1884	*a*	*a*			5,515	2,421 00	551 50	503,334	114,408 00	25,166 70
1885	*a*	*a*			7,910	2,834 00	791 00	235,526	51,130 00	11,776 30
1886	*a*	*a*			5,279	2,248 00	527 90	241,356	55,250 00	12,067 80

a Included with "Other not in barrels, sold by weight."

No. 54.—QUANTITIES and VALUES of IMPORTED FISH and FISHERY PRODUCTS ENTERED for CONSUMPTION in the United States, &c., from 1869 to 1886, inclusive—Continued.

YEAR ENDING JUNE 30—	SARDINES AND ANCHOVIES, PREPARED IN OIL, OR OTHERWISE.					SHELL-FISH AND TURTLES.	SOUNDS OR TONGUES.		OILS.	
	Quarter boxes, 4¾ x 3½ x 1½ inches.			In any other form.					Cod-liver, brown or crude.	
	4 cents per box; 2½ cents per box after 1883.			60 per cent. 1875-1883; 40 per cent., 1884-1886.		Free of duty.	20 per cent.		Free of duty under reciprocity treaty.	
	Quantities.	Values.	Duties.	Values.	Duties.	Values.	Values.	Duties.	Quantities.	Values.
	Boxes.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Gallons.*	*Dollars.*
1869	....	....	....	....	....	....	1,039 00	207 80	....	....
1870	....	....	....	....	....	a185 00	2,989 24	597 84	....	....
1871	....	....	....	....	....	....	93 00	18 60	....	....
1872	....	....	....	....	....	2,181 00	2,038 00	407 60	....	....
1873	....	....	....	....	....	3,330 43	b2 00	60	....	....
1874	....	....	....	....	....	55,084 19	....	....	88,387	54,850 00
1875	945,585	67,660 00	37,823 40	3,486 00	2,091 60	121,144 97	....	....	222,552	134,585 00
1876	6,297,945	506,149 80	251,917 80	14,592 00	8,755 20	2,347 15	....	....	94,730	59,394 50
1877	7,985,401	661,597 25	319,416 04	11,018 25	6,610 95	1,727 55	....	....	129,263	81,607 00
1878	7,175,982.25	631,736 03	287,039 29	11,521 21	6,912 72	3,944 25	....	....	284,974	166,348 00
1879	9,875,648	798,562 53	395,025 92	9,864 00	5,918 40	2,229 25	....	....	142,559	65,889 00
1880	13,378,244	1,048,535 50	535,129 76	12,772 00	7,663 20	7,012 85	....	....	264,999	113,800 00
1881	10,028,535	913,057 44	401,141 40	10,439 75	6,263 85	2,726 85	....	....	371,886	191,433 00
1882	8,405,836	767,851 58	336,233 45	14,140 86	8,484 52	9,699 38	36 60	7 32	263,651.50	133,858 16
1883	6,250,832	710,811 31	250,033 28	13,970 00	8,382 00	16,695 95	23 00 c212 00	4 60 21 20	171,007	117,666 23
1884	9,501,849.50	837,673 89	237,546 27	22,256 00	8,902 40	30,471 71	c65 00	6 50	379,853	225,451 00
1885	6,805,187	599,518 35	170,129 68	23,586 00	9,434 40	55,469 26	....	....	161,209	96,230 00
1886	7,418,010	677,918 75	185,450 27	27,462 00	10,984 80	64,632 10	....	....	....	....

a Dutiable at 20 per cent

b Dutiable at 30 per cent.

c Fish eggs at 10 per cent.

No. 54.—QUANTITIES and VALUES of IMPORTED FISH and FISHERY PRODUCTS ENTERED for CONSUMPTION in the United States, &c., from 1869 to 1886, inclusive—Continued.

YEAR ENDING JUNE 30—	OILS.								RECAPITULATION OF VALUES AND DUTIES COLLECTED.			
	Cod-liver, brown or crude.			Whale or fish, not otherwise specified.								
	20 per cent., 1869–1883; 25 per cent., 1884–1886.			Free of duty under reciprocity treaty.		20 per cent., 1869–1883; 25 per cent., 1884–1886.			TOTAL FREE OF DUTY.b	TOTAL DUTIABLE.	TOTAL FREE AND DUTIABLE.	TOTAL DUTY COLLECTED.
	Quantities.	Values.	Duties.	Quantities.	Values.	Quantities.	Values.	Duties.				
	Gallons.	*Dollars.*	*Dollars.*	*Gallons.*	*Dollars.*	*Gallons.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1869	....	1,234 00	246 80	....	....	465,273.50	182,702 61	36,540 53	....	2,054,426 15	2,054,426 15	598,377 24
1870	....	73,020 00	14,604 00	....	....	87,837	44,218 48	8,843 69	....	2,299,786 17	2,299,786 17	742,764 39
1871	....	20,476 00	4,095 20	....	....	146,796.50	82,757 56	16,551 51	84,742 59	2,174,419 26	2,259,161 85	681,742 05
1872	249,934	114,870 00	22,974 00	....	....	95,941	43,379 84	8,675 98	244,856 05	1,748,636 38	1,993,492 43	580,557 00
1873	198,855.50	94,861 80	18,972 36	....	....	62,447.50	24,923 88	4,984 78	282,650 13	2,369,874 47	2,652,524 60	798,020 55
1874	93,372	50,745 00	10,149 00	72,122	87,094 00	47,350	20,184 23	4,036 83	1,939,850 66	1,335,761 66	3,275,612 32	514,452 11
1875	14,027	7,734 00	1,546 80	55,626.50	27,059 00	42,069	15,870 00	3,174 00	2,315,144 65	948,201 48	3,263,346 13	355,066 26
1876	14,068	12,525 00	2,505 00	42,938	42,214 30	29,502	13,899 25	2,779 85	1,832,298 68	935,300 85	2,707,599 03	361,073 24
1877	13,732	15,434 00	3,086 80	19,620	10,982 00	26,711	11,237 00	2,247 40	1,435,694 76	1,028,149 91	2,463,844 67	381,251 68
1878	12,275	13,186 00	2,637 20	25,907	10,036 00	30,440	10,908 41	2,181 68	2,206,445 32	909,491 47	3,175,936 79	342,291 94
1879	29,617	28,782 00	5,756 40	42,752	15,966 00	31,603	14,820 54	2,964 10	1,825,036 89	1,192,724 82	2,957,761 71	448,133 56
1880	50,911	38,551 00	7,710 20	141,440	56,706 00	34,138	12,053 78	2,410 75	1,885,841 25	1,522,719 48	3,408,560 73	611,209 56
1881	144,771	45,330 00	9,066 00	205,407	102,206 00	65,100	22,915 10	4,583 02	2,559,312 59	1,423,894 98	3,983,207 57	482,980 67
1882	38,487	28,705 00	5,741 00	112,717	48,850 00	62,405	27,976 23	5,595 25	2,632,952 65	1,389,698 60	4,022,651 25	426,251 88
1883	47,709	41,605 00	8,321 00	155,466	85,987 00	108,916	34,766 70	6,953 34	3,324,833 82	1,551,325 38	4,876,158 20	373,252 95
1884	2,919	3,270 00	817 50	48,445	18,291 00	306,853	72,685 30	18,171 33	3,886,358 39	1,755,466 23	5,641,824 62	371,165 44
1885	35,470	33,647 00	8,411 75	62,821	23,938 00	116,229	30,874 65	7,718 66	3,499,064 92	1,511,550 93	5,010,615 85	298,102 18
1886	a115,454	67,652 00	16,913 00	....	....	65,584	20,216 00	5,054 00	985,573 50	2,354,172 09	3,339,745 59	524,254 54

a Includes both crude and refined cod-liver oil.

b Free under reciprocity treaty except "fresh for daily consumption," for value of which see page 411.

No. 55.—STATEMENT showing the QUANTITIES and VALUES of FISH and FISH OIL IMPORTED into the United States FREE of DUTY under the RECIPROCITY TREATY with the Dominion of Canada, Newfoundland, &c., and ENTERED FOR CONSUMPTION; together with the rates of duty in force under the general tariff laws on fish and fish oil not imported under said treaty, and the estimated amounts of duty remitted, during each Year ending June 30, from 1874 to 1885, inclusive.

YEAR ENDING JUNE 30—	HERRING, PICKLED.				HERRING, DRIED OR SMOKED.				MACKEREL.			
	Quantities.	Values.	Rate of duty per barrel.	Estimated duties remitted.	Quantities.	Values.	Rate of duty per pound.	Estimated duties remitted.	Quantities.	Values.	Rate of duty per barrel.	Estimated duties remitted.
	Barrels.	*Dollars.*	*Dollars*	*Dollars.*	*Boxes.*	*Dollars.*	*Cents.*	*Dollars.*	*Barrels.*	*Dollars.*	*Dollars.*	*Dollars.*
1874	53,501.75	191,492 23	1 00	53,501 75	205,819	34,669 59	½	10,290 95	89,376.75	793,764 00	2 00	178,758 50
1875	77,917.75	300,406 03	1 00	77,917 75	309,549	63,223 45	½	15,477 45	78,091.25	586,825 00	2 00	156,182 50
1876	89,042	306,947 38	1 00	89,042 00	307,190	57,560 40	½	15,359 50	76,582.85	695,847 00	2 00	153,165 70
1877	61,791.50	207,090 55	1 00	61,791 50	316,570.50	39,459 42	½	15,828 50	44,169.50	873,792 38	2 00	88,339 00
1878	79,701.50	250,920 45	1 00	79,701 50	421,834	52,715 16	½	21,091 70	101,995	907,013 00	2 00	203,990 00
1879	57,810.50	193,276 25	1 00	57,810 50	382,471	46,974 78	½	19,123 50	101,450	650,048 13	2 00	202,900 00
1880	48,604	158,443 00	1 00	48,604 00	508,615	69,986 00	½	25,430 75	112,385.50	492,807 40	2 00	224,771 00
1881	63,497	231,285 40	1 00	63,497 00	676,813	92,604 00	½	33,842 15	120,352.50	615,063 10	2 00	240,705 00
1882	77,918	273,564 50	1 00	77,918 00	1,088,361	134,377 85	½	54,418 05	57,868.25	394,322 50	2 00	115,736 50
1883	101,444.50	418,314 25	1 00	101,444 50	656,778	120,013 00	½	32,838 90	52,062	427,327 00	2 00	104,124 00
					Pounds.							
1884	126,492.50	492,409 54	1 00	126,492 50	8,330,641	137,975 00	½	41,653 21	88,215	873,567 35	2 00	176,430 00
1885	134,730	314,551 20	1 00	134,730 00	10,441,355	129,034 46	½	52,206 77	92,125	701,930 00	2 00	184,250 00

No. 55.—IMPORTS of FISH and FISH OILS into the United States under RECIPROCITY TREATY, &c., from 1874 to 1885—Continued.

YEAR ENDING JUNE 30—	OTHER, PICKLED, IN BARRELS.				OTHER, NOT IN BARRELS, SOLD BY WEIGHT.				PREPARED IN CANS.			SALMON, PICKLED.			
	Quantities.	Values.	Rate of duty per barrel.	Estimated duties remitted.	Quantities.	Values.	Rate of duty per 100 pounds.	Estimated duties remitted.	Values.	Rate of duty.	Estimated duties remitted.	Quantities.	Values.	Rate of duty per barrel.	Estimated duties remitted.
	Barrels.	*Dollars.*	*Dollars.*	*Dollars.*	*Pounds.*	*Dollars.*	*Cents.*	*Dollars.*	*Dollars.*	*P. cent.*	*Dollars.*	*Barrels.*	*Dollars.*	*Dollars.*	*Dollars.*
1874	8,719	47,466 25	1 50	13,078 50	6,104,890	152,577 94	50	80,524 45	220,444 00	35	77,155 40	3,674.75	50,173 00	3 00	11,024 25
1875	8,694.50	56,172 00	1 50	13,041 75	7,747,452	241,055 00	50	38,737 26	368,216 00	35	128,875 60	4,730.25	61,583 00	3 00	14,190 75
1876	8,248	50,374 00	1 50	12,364 50	6,360,736	210,130 94	50	31,803 68	82,484 01	35	28,869 40	4,197	49,938 00	3 00	12,591 00
1877	16,004.25	90,796 00	1 50	24,006 37	5,661,597	229,730 00	50	28,307 98	19,223 76	35	6,728 34	5,437	6[illegible],724 00	3 00	16,311 00
1878	4,974.62	38,520 00	1 50	7,461 93	10,294,061	305,007 25	50	51,470 32	20,731 21	35	7,255 93	8,423	107,309 00	3 00	25,269 00
1879	6,839.50	43,497 00	1 50	10,259 25	11,446,022	353,330 41	50	57,230 11	51,983 65	35	18,194 28	9,333.50	106,131 00	3 00	28,000 50
1880	11,428.50	54,670 00	1 50	17,142 75	14,295,884	406,037 25	50	71,479 42	82,238 79	35	28,783 57	8,231	118,104 00	3 00	24,693 00
1881	13,485.50	61,081 00	1 50	20,228 25	22,409,945	617,436 00	50	112,049 73	147,411 90	35	51,594 16	5,838.50	91,314 00	3 00	17,515 50
1882	9,838	59,467 00	1 50	14,757 00	22,825,781	705,748 53	50	114,128 92	313,458 00	35	109,710 30	4,626	85,078 00	3 00	13,878 00
1883	13,835.50	85,766 51	1 50	20,753 25	24,234,780	1,023,563 00	50	121,173 90	328,532 00	35	114,986 20	4,689	93,348 00	3 00	14,067 00
1884	14,195.50	77,525 00	2 00	28,891 00	27,391,485	1,014,544 44	50	136,957 43	207,445 15	25	51,861 29	6,403.50	100,508 00	2 00	12,807 00
1885	10,973	46,524 00	2 00	21,946 00	32,755,345	955,997 50	50	163,776 73	365,719 00	25	91,427 75	5,611.50	72,907 00	2 00	11,2[illegible]3 00

YEAR ENDING JUNE 30—	SALMON, DRIED OR SMOKED.				OIL, COD LIVER, BROWN OR CRUDE.				OIL, WHALE OR FISH.				TOTAL.	
	Quantities.	Values.	Rate of duty per pound.	Estimated duties remitted.	Quantities.	Values.	Rate of duty.	Estimated duties remitted.	Quantities.	Values.	Rate of duty.	Estimated duties remitted.	Values.	Estimated duties remitted.
	Pounds.	*Dollars.*	*Cents.*	*Dollars.*	*Gallons.*	*Dollars.*	*P. cent.*	*Dollars.*	*Gallons.*	*Dollars.*	*P. cent.*	*Dollars.*	*Dollars.*	*Dollars.*
1874	32,921	4,703 00	½	164 61	88,387	54,850 00	20	10,970 00	72,122	37,094 00	20	7,418 80	1,587,234 01	392,882 21
1875	58,096.50	8,560 00	½	290 48	222,552	134,585 00	20	26,917 00	55,626.50	27,059 00	20	5,411 80	1,847,684 48	477,042 34
1876	9,240	970 00	½	46 20	94,730	59,394 50	20	11,878 90	42,938	42,214 30	20	8,442 86	1,555,860 53	363,563 74
1877	37,069	3,704 00	½	185 35	129,263	81,607 00	20	16,321 40	19,620	10,982 00	20	2,196 40	1,118,109 11	260,015 82
1878	9,354	1,082 00	½	46 77	284,974	166,348 00	20	33,269 60	25,907	10,036 00	20	2,007 20	1,839,772 07	431,563 95
1879	277,158	11,077 00	½	1,385 79	142,559	65,889 00	20	13,177 80	42,752	15,966 00	20	3,193 20	1,539,073 22	411,274 93
1880	132,775	4,785 00	½	663 88	261,999	113,890 00	20	22,778 00	141,440	56,706 00	20	11,311 20	1,557,667 44	475,687 57
1881	365	29 00	½	1 83	371,886	191,433 00	20	38,286 60	205,407	102,206 00	20	20,441 20	2,179,863 40	597,961 42
1882	....	....	....	....	263,651.50	133,858 16	20	26,771 63	112,717	48,850 00	20	9,770 00	2,148,724 54	537,028 40
1883	690,602	35,086 00	½	3,453 01	171,007	117,666 23	20	23,533 25	155,466	85,987 00	20	17,197 40	2,735,603 62	553,571 41
1884	....	....	....	....	379,863	225,451 00	25	56,362 75	48,445	18,291 00	25	4,572 75	3,147,716 48	635,527 93
1885	....	....	....	....	161,209	96,230 00	25	24,057 50	62,821	23,938 00	25	5,984 50	2,706,831 16	689,602 25

No. 56.—STATEMENT showing the estimated amount of DUTY COLLECTED on IMPORTS of FISH into the United States from the British North American Possessions during each Year ending June 30, from 1866 to 1873, inclusive, and 1886.

YEAR ENDING JUNE 30—	FISH.							TOTAL DUTY.
	Herring, pickled.	Mackerel pickled.	Salmon, pickled.	Other pickled, in barrels.	Other not in barrels, sold by weight.	Anchovies and sardines packed in oil or otherwise.	All other, not elsewhere specified.	
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1866	2,070	10,620	1,464	9,588	5,256	323	....	29,321
1867	97,595	155,006	18,648	36,943	32,530	37	....	340,759
1868	54,301	83,310	19,539	21,282	38,940	65	....	217,437
1869	(a)	(a)	(a)	(a)	(a)	(a)	279,439	279,439
1870	(a)	(a)	(a)	(a)	(a)	(a)	292,352	292,352
1871	(a)	(a)	(a)	(a)	(a)	(a)	300,294	300,294
1872	64,200	155,462	(a)	(a)	(a)	383	88,940	308,985
1873	53,039	179,396	(a)	(a)	(a)	1,768	137,887	372,090
1886	51,263	101,778	9,064	(a)	95,816	442	38,665	297,028

a Included in "All other not elsewhere specified."

No. 57.—STATEMENT, by CUSTOMS DISTRICTS, showing the estimated DUTY collected on IMPORTS of FISH into the United States from the British North American Possessions (other than British Columbia) during the Year ending June 30, 1886.

[From Nova Scotia, New Brunswick, Prince Edward Island, Newfoundland, and Labrador.]

CUSTOMS DISTRICTS INTO WHICH IMPORTED.	FISH.						TOTAL DUTY.
	Herring, pickled.	Mackerel	Salmon, pickled.	Not in barrels, sold by weight.	Anchovies and sardines packed in oil or otherwise.	All other, not elsewhere speciu ed.	
ATLANTIC PORTS (and Chicago):	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
New York, N. Y	10,477	25,124	4,298	22,170	....	3,516	65,585
Boston and Charlestown, Mass	25,777	65,224	3,556	38,301	....	4,992	137,850
Philadelphia, Pa	45	....	....	....	....	....	45
Baltimore, Md	....	20	30	1,709	....	....	1,759
Aroostook, Me	114	2	....	10	....	8	134
Bangor, Me	4	7,290	208	1,046	....	2,359	10,907
Barnstable, Mass	....	....	....	1,232	....	....	1,232
Chicago, Ill	1,732	996	....	300	434	....	3,462
Gloucester, Mass	....	....	....	11,207	....	....	11,207
Machias, Me	....	....	....	10	....	....	10
Marblehead, Mass	2	....	....	....	....	....	2
Newark, N. J	....	....	....	....	....	1	1
Newburyport, Mass	....	....	....	....	....	14	14
Passamaquoddy, Me	796	2,436	190	15,347	....	3,139	21,908
Portland and Falmouth, Me	1,615	....	....	4,817	....	....	6,432
Portsmouth, N. H	....	....	....	2	....	....	2
Richmond, Va	2,485	....	....	....	....	....	2,485
Saint John's, Fla	....	....	....	....	....	7	7
Stonington, Conn	....	....	....	4	....	2	6
Waldoborough, Me	....	....	....	....	....	1	1
Total	43,047	101,092	8,282	95,655	434	14,039	262,549

[From Quebec, Ontario, Manitoba, and the Northwest Territory.]

BORDER PORTS (except Chicago)	8,216	686	782	160	8	24,626	34,478

No. 58.—STATEMENT showing, by CUSTOMS DISTRICTS, the KINDS, QUANTITIES, and VALUES of DUTIABLE FISH IMPORTED into the United States during each Year ending June 30, from 1866 to 1873, inclusive, and 1886.

1866.

CUSTOMS DISTRICTS INTO WHICH IMPORTED.	DUTIABLE FISH.										
	Mackerel.		Herring.		Salmon.		All other fish in barrels.		All other fish not in barrels.		Sardines and anchovies, preserved in oil or otherwise.
	Bbls.	*Dolls.*	*Bbls.*	*Dolls.*	*Bbls.*	*Dolls.*	*Bbls.*	*Dolls.*	*Pounds.*	*Dolls.*	*Dolls.*
Baltimore, Md			6	120							84
Boston and Charlestown, Mass	5,127	46,211	1,609	4,123	14	303	627	2,390	3,442,697	72,967	4,199
Buffalo Creek, N. Y			35	280			34	294			73
Champlain, N. Y					86	538			172	10	
Charleston, S. C									162	18	360
Chicago, Ill			25	132			139	1,003	400	17	507
Detroit, Mich	8	46	1	4	422	800	1,031	7,333	18,755	499	2
Gloucester, Mass							10	40	50,292	1,569	
Key West, Fla									182	18	5,482
Michigan, Mich							501	2,183			
New Orleans, La			3	10			1	7	39,949	2,746	130,665
New York, N. Y	2	4	6,550	78,794			27	479	100,434	3,378	721,562
Oswegatchie, N. Y									56	3	
Passamaquoddy, Me							4,027	16,211	389,954	7,803	
Philadelphia, Pa			76	1,048							2,701
Portland and Falmouth, Me							16	62	44,556	1,537	
Richmond, Va	175	1,860	300	850							
Salem and Beverly, Mass									225	2	
Sandusky, Ohio									24,810	400	
Savannah, Ga			150	178					2,240	109	219
Vermont, Vt					16	334	7	231	200	8	19
Total into ports other than Pacific	5,312	48,121	8,755	80,539	488	1,975	6,420	30,183	4,115,084	91,084	865,823
Total into Pacific ports			87	1,222	298	2,342	15	240	137,864	12,335	72,097
Total into the U. S	5,312	48,121	8,842	81,761	786	4,317	6,435	30,423	4,252,948	103,419	937,920
Portion from British N. A. Possessions	5,310	48,117	2,070	5,489	786	4,317	6,407	29,937	1,089,558	31,164	681

1867.

CUSTOMS DISTRICTS INTO WHICH IMPORTED.	Mackerel. *Bbls.*	Mackerel. *Dolls.*	Herring. *Bbls.*	Herring. *Dolls.*	Salmon. *Bbls.*	Salmon. *Dolls.*	All other fish in barrels. *Bbls.*	All other fish in barrels. *Dolls.*	All other fish not in barrels. *Pounds.*	All other fish not in barrels. *Dolls.*	Sardines and anchovies, preserved in oil or otherwise. *Dolls.*
Baltimore, Md	2,542	21,169	14,689	52,005	540	5,668					62
Bangor, Me									47,376	1,794	
Bath, Me			301	1,271							
Boston and Charlestown, Mass	51,865	444,802	45,532	120,561	4,337	92,081	18,047	86,990	8,695,697	230,335	5,259
Buffalo Creek, N. Y			13	50			140	1,331			
Cape Vincent, N. Y		4					8	76			
Castine, Me			15	71			7	36	6,244	275	
Champlain, N. Y	2	13	189	656	11	221	47	327	620	87	1
Charleston, S. C	315	2,947	42	216	30	654	2	12	13,448	611	907
Chicago, Ill			1,325	5,878			96	271	13,556	587	181
Cuyahoga, Ohio					1	21	146	876			
Detroit, Mich			300	900	1	30	2,766	20,411	4,827	348	
Fairfield, Conn							26	261			
Galveston, Tex			15	219			7	28	3,688	220	
Genesee, N. Y			25	141			85	616			
Gloucester, Mass	3,250	28,324	80	274					103,196	1,488	
Michigan, Mich									36,700	1,180	
Milwaukee, Wis	2	12					11	106			
Mobile, Ala									30	16	36
Key West, Fla									240	21	
Marblehead, Mass			3	3							
New Orleans, La			10	56			1	2	64,788	5,003	92,086
New York, N. Y	12,718	111,992	29,412	172,280	840	19,180	876	8,260	835,249	21,435	288,257
Niagara, N. Y							2	9			
Norfolk and Portsmouth, Va			719	1,622					8,120	712	

No. 58.—STATEMENT showing, by CUSTOMS DISTRICTS, the KINDS, QUANTITIES, and VALUES of DUTIABLE FISH IMPORTED, &c., from 1866 to 1873, and 1886—Continued.

1867.

CUSTOMS DISTRICTS INTO WHICH IMPORTED.	DUTIABLE FISH.										
	Mackerel.		Herring.		Salmon.		All other fish in barrels.		All other fish not in barrels.		Sardines and anchovies preserved in oil or otherwise.
	Bbls.	*Dolls.*	*Bbls.*	*Dolls.*	*Bbls.*	*Dolls.*	*Bbls.*	*Dolls.*	*Pounds.*	*Dolls.*	*Dolls.*
Oswegatchie, N. Y	......	......	28	145	......	......	3	14	40	2	......
Oswego, N. Y	......	......	111	386	......	......	247	1,340	510	27	......
Passamaquoddy, Me	......	......	195	505	......	......	6,359	27,723	524,078	12,845	......
Philadelphia, Pa	5,933	56,839	7,230	28,636	35	733	12	101	13,597	649	5,731
Portland and Falmouth, Me	818	9,288	2,657	10,883	401	6,389	255	1,845	692,588	19,132	......
Richmond, Va	34	433	......	......	......	......	......	......	......	......	......
Salem and Beverly, Mass	24	160	9	36	......	......	21	60	29,785	706	......
Sandusky, Ohio	......	......	......	......	......	......	......	......	48,065	1,076	......
Superior, Mich	......	......	......	......	......	......	688	4,185	......	......	......
Vermont, Vt	......	3	20	80	20	436	3	22	......	......	......
Total into ports other than Pacific	77,503	675,986	102,920	396,874	6,216	125,413	24,855	154,902	11,141,442	298,444	387,52
Total into Pacific ports	......	......	9	74	454	3,638	6	38	204,533	12,905	91,097
Total into the U. S	77,503	675,986	102,929	396,948	6,670	129,051	24,861	154,940	11,345,975	311,349	478,619
Portion from British N. A. Poss	77,503	675,986	97,595	321,404	6,670	129,051	24,630	152,701	6,528,035	199,437	73

1868.

CUSTOMS DISTRICTS INTO WHICH IMPORTED.	Mackerel *Bbls.*	Mackerel *Dolls.*	Herring *Bbls.*	Herring *Dolls.*	Salmon *Bbls.*	Salmon *Dolls.*	All other fish in barrels *Bbls.*	All other fish in barrels *Dolls.*	All other fish not in barrels *Pounds.*	All other fish not in barrels *Dolls.*	Sardines *Dolls.*
Baltimore, Md	372	2,878	5,046	17,800	305	3,159	128	917	1,050,768	33,366	4
Boston and Charlestown, Mass	21,041	176,971	24,170	76,012	3,914	55,472	10,781	43,180	7,058,915	188,285	4,133
Brazos de Santiago, Tex	......	......	......	......	......	......	......	......	1,800	154	6
Buffalo Creek, N. Y	17	212	......	......	......	......	2	10	......	......	......
Cape Vincent, N. Y	......	......	13	69	4	34	1	8	......	......	......
Castine, Me	83	1,115	41	183	......	......	3	29	9,108	329	......
Champlain, N. Y	10	66	397	1,692	22	279	10	41	......	......	......
Charleston, S. C	......	......	4	74	......	......	......	......	5,000	155	......
Chicago, Ill	......	......	101	394	......	......	28	81	7,600	219	......
Cuyahoga, Ohio	......	......	48	162	......	......	32	149	......	......	......
Detroit, Mich	......	......	18	90	1	19	442	3,007	5,225	185	......
Galveston, Tex	......	......	17	127	......	......	......	......	......	......	4,522
Genesee, N. Y	1	10	......	......	......	......	44	280	658	20	......
Georgetown, D. C	......	......	100	210	......	......	......	......	......	......	......
Gloucester, Mass	744	7,184	1	2	......	......	......	......	142,394	3,821	......
Huron, Mich	......	......	91	398	......	......	4	42	420	51	......
Key West, Fla	......	......	......	......	......	......	......	......	300	18	......
Milwaukee, Wis	......	......	......	......	......	......	83	558	......	......	......
Newark, N. J	......	......	......	......	......	......	18	136	......	......	......
New Orleans, La	......	......	186	1,933	......	......	......	......	17,760	1,389	110,574
New York, N. Y	5,847	56,956	20,781	152,756	640	7,807	312	2,967	347,462	8,579	281,702
Niagara, N. Y	3	42	......	......	3	45	2	18	......	......	......
Oswegatchie, N. Y	......	......	31	160	3	37	2	8	25	2	......
Oswego, N. Y	......	......	2	8	......	......	129	789	......	......	......
Passamaquoddy, Me	4,681	41,998	707	2,034	5	85	1,217	8,787	821,607	25,386	25
Philadelphia, Pa	1,398	12,695	515	3,213	......	......	32	104	80	3	4
Portland and Falmouth, Me	7,413	63,941	6,376	22,556	1,062	15,686	168	771	514,757	15,696	4
Salem and Beverly, Mass	5	25	12	45	......	......	......	......	3,329	91	......
Sandusky, Ohio	......	......	......	......	......	......	......	......	2,300	42	......
Vermont, Vt	41	346	3,945	10,530	554	7,467	490	2,227	57	3	......
Waldoborough, Me	......	......	......	......	......	......	......	......	200	3	......
Wilmington, N. C	......	......	......	......	......	......	......	......	9,702	347	......
Superior, Mich	......	......	......	......	......	......	303	1,225	24,752	489	......
Total into ports other than Pacific	41,656	364,439	62,602	290,448	6,513	90,090	14,231	65,334	10,024,169	278,633	401,010
Total into Pacific ports	......	......	57	987	33	197	16	107	474,379	28,315	70,697
Total into the U. S	41,656	364,439	62,659	291,435	6,546	90,287	14,247	65,441	10,498,548	306,948	471,707
Portion from British N. A. Poss	41,655	364,429	54,301	181,860	6,513	90,090	14,204	65,019	7,920,074	234,561	137

No. 58.—STATEMENT showing, by CUSTOMS DISTRICTS, the KINDS, QUANTITIES, and VALUES of DUTIABLE FISH IMPORTED, &c., from 1866 to 1873, and 1886—Continued.

CUSTOMS DISTRICTS INTO WHICH IMPORTED.	Fish, fresh and cured, not of American fisheries, 1869.	Fish, fresh and cured, not of American fisheries, 1870.	Fish, fresh and cured, not of American fisheries, 1871.	1872. DUTIABLE FISH. Herring.		Mackerel.		Sardines and anchovies, preserved in oil or otherwise.	All other fish, not elsewhere specified.
	Dolls.	*Dolls.*	*Dolls.*	*Bbls.*	*Dolls.*	*Bbls.*	*Dolls.*	*Dolls.*	*Dolls.*
Aroostook, Me	49	544	382	43	177				95
Baltimore, Md	69,974	39,912	36,473	11,886	46,908	1,708	9,417	134	828
Bangor, Me									53
Barnstable, Mass		875							
Bath, Me		10	36						1
Boston and Charlestown, Mass	647,403	723,204	735,364	37,316	119,489	51,051	272,241	15,367	213,260
Brazos de Santiago, Tex	303	734	860					285	677
Buffalo Creek, N. Y	594	4,505	664			10	45		5
Cape Vincent, N. Y	197	36	19						9
Castine, Me	339								
Champlain, N. Y	1,652	3,078	3,477	106	480	14	88		275
Charleston, S. C	134		141					10	10
Chicago, Ill	2,271	1,455	8,569	240	1,350	178	979	693	446
Cuyahoga, Ohio		234	1,353						354
Delaware, Del			16						
Detroit, Mich	4,452	12,138	3,698						1,165
Fairfield, Conn		18	286						31
Galveston, Tex	554	304	81	2	26			3	
Genesee, N. Y	314	68	58	31	159				8
Gloucester, Mass	14,628	12,773	4,926	5	34	540	4,135		2,181
Huron, Mich	678	3,776	1,946	3	13	81	462		82
Key West, Fla		339	1,223					71	1,535
Machias, Me	41	614	232	19	41				223
Marblehead, Mass	146	189	284						6
Miami, Ohio		84							
Milwaukee, Wis			2						15
Minnesota, Minn		12	15						
Newark, N. J	436	68	16						16
New Bedford, Mass			70						16
New Haven, Conn									21
New London, Conn	49								
New Orleans, La	106,178	224,782	151,477	301	3,957			57,700	7,270
New York, N. Y	716,741	833,923	1,139,303	23,789	196,189	8,311	51,214	522,986	76,919
Niagara, N. Y	879	650	1,400						
Norfolk and Portsmouth, Va	1,495					1	10		
Oswegatchie, N. Y	93	289	163	51	220	6	41		77
Oswego, N. Y	1,413	230	1,169	65	303	15	69		511
Paso del Norte, Tex. and N. Mex.	84		17						
Passamaquoddy, Me	123,890	120,081	139,359	309	1,025	982	6,721		46,588
Pensacola, Fla				18	78				
Philadelphia, Pa	8,895	13,253	7,527	279	1,049	2,752	21,481	658	12
Portland and Falmouth, Me	121,480	152,217	159,743	3,456	12,120	13,424	81,175		50,823
Portsmouth, N. H		310	102						68
Richmond, Va	800	3,322							25
Salem and Beverly, Mass	1,023	707	354						44
Sandusky, Ohio	75	575	577						433
Savannah, Ga		124	473			122	1,326	10	144
Saint John's, Fla	352	246							
Superior, Mich	7,514	6,196	4,431						1,420
Vermont, Vt	8,703	8,573	23,377	260	1,058	7	41	61	1,404
Waldoborough, Me		25	460	21	105				39
Total into ports other than Pacific	1,843,829	2,170,473	2,430,126	78,200	384,790	79,202	449,465	598,068	407,119
Total into Pacific ports	129,341	145,980	73,798	17	145	33	159	25,467	42,475
Total into the United States	1,973,170	2,316,453	2,503,924	78,217	384,935	79,235	449,624	623,535	449,594
Portion from the British North American Possessions	1,117,757	2,169,407	1,201,175	64,200	225,144	77,731	438,410	766	355,761

No. 58.—STATEMENT showing, by CUSTOMS DISTRICTS, the KINDS, QUANTITIES, and VALUES of DUTIABLE FISH IMPORTED, &c., from 1866 to 1873, and 1886—Continued.

CUSTOMS DISTRICTS INTO WHICH IMPORTED.	1873.					
	DUTIABLE FISH.					
	Herring.		Mackerel.		Sardines and anchovies, preserved in oil or otherwise.	All other fish, not elsewhere specified.
Lake ports.	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars.*	*Dollars.*	*Dollars.*
Aroostook, Me	80	805	1	4	....	162
Buffalo Creek, N. Y	201	584	....	....	....	2,241
Cape Vincent, N. Y	....	....	....	....	....	11
Champlain, N. Y	235	871	9	41	....	242
Chicago, Ill	2,761	11,626	234	1,439	91	....
Cuyahoga, Ohio	....	....	590	3,140	....	36
Detroit, Mich	....	....	....	....	19	941
Duluth, Minn	....	....	....	....	....	15
Genesee, N. Y	....	....	....	....	....	8
Huron, Mich	11	55	12	89	16	45
Milwaukee, Wis	1,000	4,000	....	....	....	....
Niagara, N. Y	1,508	4,297	....	....	3,401	....
Oswegatchie, N. Y	192	743	4	26	....	66
Oswego, N. Y	20	78	10	62	....	....
Sandusky, Ohio	....	....	....	....	....	858
Superior, Mich	....	....	....	....	....	732
Vermont, Vt	1,295	4,845	5	47	....	7,072
Total lake ports	7,303	28,494	865	4,848	3,527	12,429
Atlantic and Gulf ports.						
Baltimore, Md	1,777	5,781	780	3,392	350	989
Bangor, Me	26	66	....	....	....	2,207
Bath, Me	....	....	....	....	....	22
Belfast, Me	20	60	....	....	....	40
Boston and Charlestown, Mass	18,837	57,720	40,760	255,591	35,401	276,457
Brazos de Santiago, Tex	....	....	....	....	....	388
Charleston, S. C	18	146	....	....	130	3
Gloucester, Mass	....	....	412	4,418	....	3,381
Galveston, Tex	....	....	....	....	75	....
Key West, Fla	....	....	....	....	228	1,313
Machias, Me	....	....	....	....	....	114
Marblehead, Mass	1	5	....	....	....	12
New Orleans, La	254	4,472	....	....	143,534	4,186
New York, N. Y	30,937	235,955	9,452	45,210	904,979	50,770
Norfolk and Portsmouth, Va	773	914	1	2	....	12
Paso del Norte, Tex. and N. Mex	....	....	....	....	177	....
Passamaquoddy, Me	135	375	943	8,047	....	61,865
Philadelphia, Pa	....	....	660	6,577	243	46
Portland and Falmouth, Me	8,384	24,743	37,016	282,363	....	189,303
Salem and Beverly, Mass	15	55	....	....	....	272
Savannah, Ga	119	470	....	....	19	746
Saint John's, Fla	....	....	....	....	....	1
Waldoborough, Me	3	6	....	....	....	50
Total into Atlantic and Gulf ports	61,290	330,768	90,024	605,609	1,085,154	502,124
Total into ports other than Pacific	68,692	359,262	90,889	610,457	1,088,681	604,553
Total into Pacific ports	....	....	....	....	84,023	59,360
Total into the United States	68,692	359,262	90,889	610,457	1,172,704	663,913
Portion from British North American Possessions	53,039	170,377	89,698	605,778	3,527	552,032

No. 58.—STATEMENT showing, by CUSTOMS DISTRICTS, the KINDS, QUANTI-S, and VALUES of DUTIABLE FISH IMPORTED, &c., from 1866 to 1873, 1886—Continued.

CUSTOMS DISTRICTS INTO WHICH IMPORTED.	1886.				
	DUTIABLE FISH.				
	Anchovies and sardines packed in oil or otherwise.	Cod, haddock, hake, and pollock, dried, smoked, or pickled.		Herring, dried or smoked.	
Lake ports.	*Dollars.*	*Pounds.*	*Dollars.*	*Pounds.*	*Dollars.*
Aroostook, Me		2,400	113	1,690	30
Buffalo Creek, N. Y					
Cape Vincent, N. Y					
Champlain, N. Y					
Chicago, Ill	6,482	38,520	2,785	60,057	1,465
Detroit, Mich					
Duluth, Minn					
Genesee, N. Y	1,149				
Huron, Mich		6,000	180		
Michigan, Mich					
Milwaukee, Wis	109	8,400	625		
Minnesota, Minn	107	24,220	1,741	1,475	67
Niagara, N. Y					
Oswegatchie, N. Y		240	18		
Sandusky, Ohio					
Superior, Mich					
Vermont, Vt	19	200	16	23,500	418
Total lake ports	7,866	79,980	5,478	86,722	1,980
Atlantic and Gulf ports.					
Baltimore, Md	1,687	55	2	375,280	7,403
Bangor, Me		648	15	208,626	3,613
Barnstable, Mass		246,400	5,063		
Boston and Charlestown, Mass	60,080	5,907,623	148,659	2,447,715	51,457
Corpus Christi, Tex	311				
Galveston, Tex	2 606				
Gloucester, Mass		2,241,460	36,227		
Key West, Fla	806	28,107	2,415		
Louisville, Ky	765				
New Orleans, La	65,779	35,238	2,270	200	8
New York, N. Y	583,734	4,124,807	137,498	318,044	5,625
Passamaquoddy, Me		793,442	14 586	2,275,638	27,928
Philadelphia, Pa	11,579				
Portland and Falmouth, Me		863,470	16,553		
Richmond, Va					
Salem and Beverly, Mass		836	29		
Savannah, Ga					
Saint Louis, Mo	2,043	110	6		
All other Atlantic and Gulf ports	592	1,904	19	400	4
Total into Atlantic and Gulf ports	729,982	14,244,100	363,342	5,625,903	96,038
Total into ports other than Pacific	737,848	14,324,080	368,820	5,712,625	98,018
Total into Pacific ports	85,852			100	3
Total into the United States	823,700	14,324,080	368,820	5,712,725	98,021
Portion from British North American Possessions	1,105	13,498,382	333,847	5,664,977	95,548

No. 58.—STATEMENT showing, by CUSTOMS DISTRICTS, the KINDS, QUANTITIES, and VALUES of DUTIABLE FISH IMPORTED, &c., from 1866 to 1873, and 1886—Continued.

CUSTOMS DISTRICTS INTO WHICH IMPORTED.	1886.						
	DUTIABLE FISH.						
	Herring, pickled or salted.		Mackerel, pickled.		Salmon, pickled.		All other dutiable fish.
Lake ports.	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars.*	*Barrels.*	*Dollars*	*Dollars.*
Aroostook, Me	116	355	1	12			30
Buffalo Creek, N. Y							9,910
Cape Vincent, N. Y	1	5					661
Champlain, N. Y	44	177			2	12	501
Chicago, Ill	14,149	63,303	738	6,441			22,797
Detroit, Mich	522	1,792					36,657
Duluth, Minn							357
Genesee, N. Y							
Huron, Mich	505	1,648	50	175			15,692
Michigan, Mich							25
Milwaukee, Wis	1,864	7,490					437
Minnesota, Minn	809	5,661					27,655
Niagara, N. Y							661
Oswegatchie, N. Y	18	74					
Sandusky, Ohio	368	762					7,245
Superior, Mich							1,403
Vermont, Vt	15	68	53	186	389	3,714	745
Total lake ports	18,411	81,335	842	6,814	391	3,726	124,866
Atlantic and Gulf ports.							
Baltimore, Md			10	50	15	134	95
Bangor, Me	4	17	3,645	30,952	104	1,418	9,437
Barnstable, Mass							
Boston and Charlestown, Mass	25,857	67,890	32,612	206,307	1,779	20,633	23,350
Corpus Christi, Tex							
Galveston, Tex							22
Gloucester, Mass							
Key West, Fla							485
Louisville, Ky							
New Orleans, La							1,022
New York, N. Y	48,247	432,050	12,562	54,308	2,150	21,591	46,554
Passamaquoddy, Me	796	1,796	1,218	9,433	95	1,088	12,557
Philadelphia, Pa	46	239					89
Portland and Falmouth, Me	1,615	5,102					
Richmond, Va	2,485	3,700					
Salem and Beverly, Mass							6
Savannah, Ga	8	72					
Saint Louis, Mo	409	5,162					90
All other Atlantic and Gulf ports	2	6					207
Total into Atlantic and Gulf ports	79,469	536,034	50,017	301,050	4,143	44,864	94,532
Total into ports other than Pacific	97,880	617,369	50,860	307,864	4,534	48,590	219,398
Total into Pacific ports					28	224	51,868
Total into the United States	97,880	617,369	50,889	307,864	4,562	48,814	271,266
Portion from British North American Possessions	51,263	161,959	50,889	307,864	4,560	48,796	156,285

No. 59.—STATEMENT showing, by COUNTRIES, the KINDS, QUANTITIES, and VALUES of FISH IMPORTED into the United States during the Year ending June 30, 1886.

COUNTRIES FROM WHICH IMPORTED.	FREE OF DUTY.							DUTIABLE.		
	Salmon, fresh.		All other fresh fish.		Lobsters, canned or preserved.	All other.	TOTAL FREE OF DUTY.	Anchovies and sardines, packed in oil or otherwise.	Cod, haddock, hake, and pollock, dried, smoked, or pickled.	
	Pounds.	*Dolls.*	*Pounds.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Pounds.*	*Dolls.*
Austria								30,354		
Belgium								202		
Chili						28	28			
China						1,931	1,931	1	404	17
Denmark								89		
Danish West Indies								3		
France						26	26	708,840		
French West Indies									473,324	16,576
Miquelon, Langley, and St. Pierre Islands									207,938	8,082
Germany								8,331		
England						47	47	40,782	9,381	677
Scotland								438		
Gibraltar								12		
Nova Scotia, New Brunswick, &c.	1,118,933	115,563	6,582,818	167,006	336,728	61,669	680,966	1,086	11,717,524	263,036
Quebec, Ontario, &c., and N. W. Ter	303,687	29,216	12,283,619	352,945	2,254		384,415	19	8,610	321
British Columbia			250	10		25	35			
Newfoundland and Labrador	100	10	865,000	5,800			5,810		1,772,248	70,490
British West Indies						613	613			
British Honduras									180	5
Hong-Kong						225	225		212	19
Hayti						222	222			
Italy								4,005	870	61
Mexico			1,100	34		305	339	811		
Netherlands								7,024		
Dutch West Indies						460	460			
Portugal								5,375		
Azore, Madeira, and Cape Verde Islands									150	9
San Domingo						65	65			
Spain								3,968		
Cuba						653	653	887	28,507	2,445
Sweden and Norway						4	4	11,883	104,732	7,082
Venezuela						834	834			
Total	1,422,720	144,789	19,732,787	525,795	338,982	67,107	1,076,673	823,700	14,324,080	368,820

No. 59.—STATEMENT showing, by COUNTRIES, the KINDS, QUANTITIES, and VALUES of FISH IMPORTED, &c., 1886—Continued.

COUNTRIES FROM WHICH IMPORTED.	DUTIABLE.										TOTAL VALUE OF FISH IMPORTED.
	Herring.				Mackerel, pickled.		Salmon, pickled.		All other.	TOTAL DUTIABLE.	
	Dried or smoked.		Pickled or salted.								
	Pounds.	*Dolls.*	*Bbls.*	*Dolls.*	*Bbls.*	*Dolls.*	*Bbls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*
Austria										30,354	30,354
Belgium			26	299					10	511	511
Chili											28
China									42,571	42,589	41,520
Denmark			6	28						117	117
Danish West Indies										3	3
France	30	14	50	316					5,546	714,716	714,742
French West Indies										16,576	16,576
Miquelon, Langley, and St. Pierre Islands										8,082	8,082
French Possessions, all other									180	180	180
Germany	8,394	111	11,797	115,029					10,882	134,363	134,353
England	34	2	2,783	14,473					9,115	65,049	65,096
Scotland			814	5,048					1,130	6,616	6,616
Gibraltar										12	12
Nova Scotia, New Brunswick, &c.	4,602,498	75,302	30,223	88,848	50,497	304,987	2,901	33,456	55,114	821,829	1,502,795
Quebec, Ontario, &c	23,500	418	8,216	28,347	343	2,542	391	3,726	98,505	133,878	518,293
British Columbia	100	3					28	224	1,606	1,833	1,868
Newfoundland and Labrador	1,038,879	10,825	12,824	44,764	49	335	1,240	11,390	1,040	147,844	153,654
British West Indies									23	23	636
British Honduras									8	13	13
Hong-Kong									3,945	3,964	4,189
British Possessions in Australasia									598	598	598
Hawaiian Islands									1,509	1,509	1,509
Hayti											222
Italy							1	8	1,818	5,982	5,982
Japan									14	14	14
Mexico									1,120	1,431	1,770
Netherlands	33,464	2,105	22,117	273,914					452	283,495	283,495
Dutch West Indies											460
Portugal										5,875	5,375
Azore, Madeira, and Cape Verde Islands									43	52	52
Russia on the Baltic									2,883	2,883	2,883
Russia, Asiatic									147	147	147
San Domingo											65
Spain									39	4,007	4,007
Cuba									665	3,097	4,650
Sweden and Norway	5,826	241	9,024	46,303			1	10	32,303	97,822	97,826
Venezuela											834
Total	5,712,725	98,021	97,880	617,369	50,889	307,864	4,562	48,814	271,266	2,535,854	3,612,527

No. 60.—STATEMENT showing the KINDS, QUANTITIES, and VALUES of DOMESTIC FISH and FISH OIL, and the TOTAL VALUE of FOREIGN FISH and FISH OIL, EXPORTED from the United States during each Year from 1821 to 1886.

YEARS ENDING—	DOMESTIC FISH AND FISH OIL.										TOTAL VALUE OF FOREIGN FISH AND FISH OIL.
	Dried or smoked.		Pickled.		Other cured.	Fresh.	Oysters.	Whale and fish oil.		TOTAL VALUE.	
Sept. 30—	Cwts.	Dolls.	Bbls.	Dolls.	Dolls.	Dolls.	Dolls.	Galls.	Dolls.	Dolls.	Dolls.
1821 ...	267, 305	708, 778	76, 950	264, 813	......	......	......	1, 068, 025	348, 991	1, 322, 582	3, 080
1822 ...	241, 228	666, 730	70, 026	249, 108	......	......	......	990, 325	211, 415	1, 227, 253	1, 463
1823 ...	262, 766	734, 024	76, 772	270, 776	......	......	......	1, 453, 126	415, 713	1, 420, 513	260
1824 ...	310, 189	873, 685	74, 173	268, 010	......	......	......	1, 251, 836	296, 708	1, 433, 412	4, 761
1825 ...	300, 857	830, 356	71, 002	248, 417	......	......	......	1, 072, 615	250, 200	1, 328, 973	383
1826 ...	260, 803	667, 742	86, 877	257, 180	......	......	......	652, 401	183, 343	1, 108, 265	590
1827 ...	247, 821	747, 171	67, 054	240, 276	......	......	......	481, 180	142, 648	1, 130, 095	1, 704
1828 ...	265, 217	819, 926	64, 454	246, 737	......	......	......	488, 468	140, 279	1, 206, 942	400
1829 ...	294, 761	747, 541	62, 030	220, 527	......	......	......	1, 237, 962	358, 822	1, 326, 890	......
1830 ...	229, 796	530, 690	66, 953	225, 987	......	......	......	1, 833, 196	568, 326	1, 325, 008	3, 774
1831 ...	230, 577	625, 393	92, 861	304, 441	......	......	......	1, 637, 534	554, 440	1, 484, 274	276
1832 ...	250, 514	749, 909	103, 274	306, 812	......	......	......	3, 605, 913	1, 009, 728	2, 066, 449	972
1833 ...	240, 689	712, 317	86, 897	277, 973	......	......	......	3, 298, 872	924, 810	1, 915, 100	4, 552
1834 ...	253, 132	630, 384	61, 931	223, 290	......	......	......	2, 614, 814	740, 619	1, 594, 293	1, 800
1835 ...	287, 721	783, 895	52, 097	224, 639	......	......	......	2, 217, 321	773, 486	1, 782, 020	21, 576
1836 ...	240, 760	746, 464	48, 629	221, 426	......	......	......	2, 362, 325	1, 049, 466	2, 017, 856	65, 379
1837 ...	188, 943	588, 506	40, 946	181, 384	......	......	......	3, 024, 001	1, 271, 545	2, 041, 885	9, 260
1838 ...	206, 028	626, 245	42, 034	192, 758	......	......	......	4, 824, 376	1, 556, 775	2, 375, 778	800
1839 ...	208, 720	709, 218	24, 328	141, 320	......	......	......	1, 482, 908	515, 484	1, 366, 022	9, 034
1840 ...	211, 425	541, 858	42, 556	179, 106	......	......	......	4, 520, 878	1, 404, 984	2, 125, 948	7, 062
1841 ...	252, 199	602, 810	36, 927	148, 973	......	......	......	4, 094, 924	1, 260, 660	2, 012, 443	15, 188
1842 ...	256, 083	567, 782	41, 416	162, 324	......	......	......	3, 909, 728	1, 315, 411	2, 045, 517	7, 476
June 30—											
1843*a* ..	174, 220	381, 175	29, 537	116, 042	......	......	......	2, 479, 910	803, 774	1, 300, 991	1, 643
1844 ...	271, 610	690, 836	44, 168	197, 179	......	......	......	4, 104, 504	1, 464, 968	2, 361, 083	3, 164
1845 ...	288, 380	803, 353	43, 478	208, 654	......	......	......	4, 505, 662	1, 520, 363	2, 532, 370	321
1846 ...	277, 401	609, 559	56, 588	230, 495	......	......	......	2, 652, 874	946, 298	1, 876, 352	213
1847 ...	258, 870	659, 629	31, 072	136, 221	......	......	......	3, 189, 562	1, 070, 659	1, 866, 509	100, 028
1848 ...	206, 549	609, 482	22, 518	109, 315	......	......	......	1, 607, 038	552, 388	1, 271, 185	246, 865
1849 ...	167, 457	419, 092	22, 636	93, 085	......	......	......	2, 783, 480	965, 597	1, 477, 774	135, 706
1850 ...	168, 600	365, 349	19, 483	91, 445	......	......	......	1, 470, 197	672, 640	1, 129, 434	143, 948
1851 ...	151, 088	367, 729	21, 616	113, 932	......	......	......	2, 004, 886	882, 485	1, 364, 146	173, 359
1852 ...	134, 732	354, 127	19, 622	98, 883	......	......	......	892, 309	440, 387	893, 297	208, 004
1853 ...	131, 665	371, 607	15, 060	89, 409	......	......	......	321, 989	223, 247	684, 263	363, 850
1854 ...	131, 316	389, 973	25, 609	162, 187	......	......	......	718, 842	490, 426	1, 042, 586	381, 724
1855 ...	119, 926	379, 802	17, 176	94, 111	......	......	......	705, 492	485, 505	959, 508	354, 080
1856 ...	168, 971	578, 011	31, 309	173, 939	......	......	......	646, 694	526, 338	1, 278, 286	279, 278
1857 ...	174, 765	570, 348	36, 048	211, 883	......	......	......	414, 466	363, 665	1, 145, 896	262, 965
1858 ...	161, 269	487, 007	30, 892	197, 441	......	......	......	840, 127	597, 107	1, 281, 555	230, 580
1859 ...	209, 350	642, 901	35, 361	203, 760	......	......	......	996, 341	508, 762	1, 445, 423	109, 716
1860 ...	219, 028	690, 088	34, 119	191, 634	......	......	......	1, 335, 736	1, 789, 089	2, 670, 811	242, 421
1861 ...	219, 324	634, 941	48, 685	244, 028	......	......	......	1, 009, 468	581, 264	1, 460, 233	184, 798
1862 ...	250, 819	712, 584	68, 642	330, 685	......	79, 453	......	2, 599, 316	1, 280, 697	2, 403, 419	56, 076
1863 ...	228, 234	921, 131	75, 262	420, 316	......	......	......	2, 055, 511	1, 483, 503	2, 834, 040	131, 260
1864 ...	192, 505	967, 018	75, 280	508, 568	20, 543	......	85, 089	416, 405	438, 957	2, 030, 075	138, 804
1865 ...	157, 472	1, 107, 955	56, 874	632, 690	......	13, 890	126, 889	644, 547	816, 494	2, 697, 918	144, 159
1866 ...	139, 693	734, 427	34, 305	360, 074	......	192, 198	200, 409	177, 509	205, 250	1, 692, 358	129, 019
1867 ...	109, 114	596, 586	22, 591	217, 494	......	189, 281	181, 271	426, 882	319, 840	1, 504, 472	429, 951
1868 ...	129, 074	598, 137	25, 033	209, 461	......	184, 774	121, 946	706, 534	507, 476	1, 621, 794	353, 890
1869 ...	88, 415	398, 825	24, 228	213, 455	272, 397	65, 348	89, 266	94, 361	81, 860	1, 121, 151	212, 498
1870 ...	111, 672	579, 334	30, 935	253, 211	349, 058	69, 131	134, 804	310, 878	228, 278	1, 613, 816	315, 844
1871 ...	119, 618	592, 598	29, 653	226, 369	467, 620	39, 983	168, 122	862, 434	452, 937	1, 947, 629	376, 018
1872 ...	126, 613	588, 194	30, 642	209, 077	635, 538	67, 832	173, 711	1, 171, 646	552, 756	2, 227, 103	347, 136
1873 ...	118, 076	569, 151	16, 747	109, 201	677, 171	64, 577	243, 723	288, 263	154, 243	1, 818, 066	544, 090
1874 ...	129, 982	612, 589	29, 000	226, 041	1, 128, 208	56, 974	223, 733	573, 775	280, 750	2, 528, 295	206, 800
1875 ...	129, 752	710, 121	51, 025	359, 069	1, 855, 550	69, 448	170, 277	895, 907	413, 411	3, 578, 476	217, 456
1876 ...	175, 528	900, 306	54, 201	417, 281	2, 102, 522	80, 879	214, 196	1. 067, 515	436, 072	4, 151, 256	153, 492
1877 ...	159, 648	791, 785	76, 227	486, 738	2, 486, 225	114, 338	260, 620	1, 026, 038	442, 165	4, 581, 871	229, 337
1878 ...	188, 831	766, 154	57, 554	416, 162	3, 198, 896	84, 278	393, 061	904, 988	411, 808	5, 270, 359	233, 273
1879 ...	197, 130	748, 747	47, 764	290, 862	2, 939, 587	80, 437	453, 306	2, 236, 265	756, 248	5, 260, 187	293, 590
1880 ...	179, 450	739, 231	54, 345	284, 293	2, 826, 444	124, 962	543, 895	1, 022, 889	349, 109	4, 367, 934	239, 488
1881 ...	212, 691	840, 190	52, 092	264, 723	2, 803, 330	97, 539	582, 249	597, 812	229, 726	4, 817, 766	183, 871
1882 ...	159, 512	635, 155	38, 224	244, 454	3, 218, 581	89. 148	612, 793	1, 083, 925	420, 730	5, 220, 861	328, 451
1883 ...	158, 445	882, 830	48, 551	372, 385	3, 202, 412	72, 875	629, 636	226, 983	115, 490	5, 275, 628	322, 046
1884 ...	197, 352	1, 140, 952	45, 034	206, 896	2, 661, 587	62, 009	572, 487	488, 915	190, 704	4, 933, 635	408, 110
1885 ...	220, 505	1, 079, 115	60, 004	310, 170	2, 754, 665	83, 850	715, 619	977, 768	321, 227	5, 214, 146	257. 348
1886 ...	190, 253	890, 311	59, 371	288, 188	2, 268, 649	29, 734	732, 019	1, 184, 871	361, 171	4, 570, 072	284, 773

a Nine months.

No. 61.—STATEMENT showing, by COUNTRIES, the KINDS, QUANTITIES, and VALUES of DOMESTIC FISH and FISH OIL, and the TOTAL VALUES of FOREIGN FISH and FISH OIL EXPORTED from the United States during the Years ending June 30, 1884, 1885, and 1886.

[Abbreviation: n. e. s., not elsewhere specified.]

KINDS OF FISH.	ENGLAND.		NOVA SCOTIA, NEW BRUNSWICK, PRINCE EDWARD ISLAND, QUEBEC, ONTARIO, MANITOBA, AND NORTHWEST TERRITORY.		GERMANY.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1884.						
		Dollars.		*Dollars.*		*Dollars.*
Codfish, haddock, hake, and pollock, dried, smoked, and cured...pounds	29,643	1,096	727,967	20,401	1,185	77
Mackerel, pickled...barrels	93	1,105	850	4,713		
Salmon:						
Canned		1,774,340		608		2,519
Other		11,659		10,884		663
Fish, fresh, n. e. s...pounds			1,353,160	42,332		
Fish, dried, smoked, and cured, n. e. s., pounds	110,878	5,650	560,608	29,842	658,699	107,524
Fish, pickled, n. e. s...barrels	1,429	6,084	1,610	10,548	19	220
Shell-fish:						
Oysters		349,706		92,080		28,303
Other		12,171		35,271		7,533
Whale and fish oil...gallons	256,344	74,843	14,771	6,901	29,004	10,964
Total value of domestic fish		2,236,654		253,640		157,833
Total value of foreign fish		33,091		122,969		2,525
1885.						
Codfish, haddock, hake, and pollock, dried, smoked, and cured...pounds	5,120	256	244,942	7,074	621	44
Mackerel, pickled...barrels	532	4,677	937	2,938	5	35
Salmen:						
Canned		1,686,375		24,897		317
Other		1,120		125		539
Fish, fresh, n. e. s...pounds			894,473	26,075		
Fish, dried, smoked, and cured, n. e. s., pounds	161,718	12,542	504,143	28,113	744,791	99,963
Fish, pickled, n. e. s...barrels	365	7,006	434	1,519	15	65
Shell-fish:						
Oysters		512,115		106,801		12,506
Other		16,073		29,809		27,869
Whale and fish oil...gallons	391,705	107,206	4.300	1,549	63,013	19,659
Total value of domestic fish		2,347,370		228,900		160,997
Total value of foreign fish		5,862		19,817		12,124
1886.						
Codfish, haddock, hake, and pollock, dried, smoked, and cured...pounds	148	10	18,606	1,209	87	5
Mackerel, pickled...barrels	79	753	68	389	11	75
Salmon:						
Canned		1,441,456		23,960		471
Other		136		124		
Fish, fresh, n. e. s...pounds			853,386	26,205	75	10
Fish, dried, smoked, and cured, n. e. s., pounds	127,340	6,259	397,125	22,802	630,732	86,443
Fish, pickled, n. e. s...barrels	28	214	498	3,815	10	50
Shell-fish:						
Oysters		518,469		100,343		10,619
Other		10,610		23,223		4,074
Whale and fish oil...gallons	285,074	83,374	9,543	8,706	74,941	20,483
Total value of domestic fish		2,061,281		210,798		122,230
Total value of foreign fish		4,923		10,172		3,183

No. 61.—EXPORTS of DOMESTIC and FOREIGN FISH, &c., by COUNTRIES, &c., 1884-1886—Continued.

KINDS OF FISH.	HONG-KONG.		BRITISH POSSESSIONS IN AUSTRALASIA.		HAWAIIAN ISLANDS.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1884.						
		Dollars.		*Dollars.*		*Dollars.*
Codfish, haddock, hake, and pollock, dried, smoked, and cured ....pounds..	34, 380	2, 123	71, 930	4, 874	121, 765	7, 500
Mackerel, pickled ....barrels..						
Salmon:						
Canned		11, 044		401, 679		28, 242
Other				14, 105		41, 464
Fish, fresh, n. e. s ....pounds..						
Fish, dried, smoked, and cured, n. e. s., pounds	1, 149, 579	63, 947	27, 017	2, 425	271, 857	16, 106
Fish, pickled, n. e. s..............barrels..			882	4, 392	730	7, 958
Shell-fish:						
Oysters		17		17, 498		6, 008
Other		87, 280		6, 550		15, 259
Whale and fish oil ....gallons..	4, 643	2, 470	33, 038	16, 032	244	110
Total value of domestic fish		166, 890		467, 555		122, 707
Total value of foreign fish				12, 335		5, 166
1885.						
Codfish, haddock, hake, and pollock, dried, smoked, and cured ....pounds..	63, 730	3, 130	517, 740	25, 456	153, 580	6, 719
Mackerel, pickled..............barrels..			30	300		
Salmon:						
Canned		8, 039		383, 992		20, 724
Other		1, 200		12, 292		36, 738
Fish, fresh, n. e. s ....pounds..						
Fish, dried, smoked, and cured, n. e. s., pounds	946, 736	41, 015	21, 367	1, 543	311, 001	15, 954
Fish, pickled, n. e. s ....barrels..			1, 785	9, 135	91	766
Shell-fish:						
Oysters		167		11, 043		4, 512
Other		169, 100		23, 479		15, 260
Whale and fish oil ....gallons..	13, 635	5, 701	120, 024	51, 664	703	238
Total value of domestic fish		228, 352		518, 904		100, 911
Total value of foreign fish		33		20, 116		3, 091
1886.						
Codfish, haddock, hake, and pollock, dried, smoked, and cured ....pounds..	49, 000	2, 641	145, 400	7, 546	225, 526	11, 382
Mackerel, pickled..............barrels..			134	805		
Salmon:						
Canned		6, 869		290, 857		21, 575
Other		1, 840		910		20, 815
Fish, fresh, n. e. s ....pounds..						
Fish, dried, smoked, and cured, n. e. s., pounds	477, 542	19, 712	17, 285	1, 609	407, 568	19, 723
Fish, pickled, n. e. s ....barrels..	458	2, 935	416	3, 491	496	4, 021
Shell-fish:						
Oysters		672		29, 977		7, 900
Other		186, 392		41, 970		19, 736
Whale and fish oil ....gallons..	15, 430	5, 688	54, 032	18, 585	1, 690	856
Total value of domestic fish		226, 749		395, 750		106, 098
Total value of foreign fish				43, 090		1, 627

No. 61.—EXPORTS of DOMESTIC and FOREIGN FISH, &c., by COUNTRIES, &c., 1884–1886—Continued.

KINDS OF FISH.	HAYTI.		UNITED STATES OF COLOMBIA.		ALL OTHER COUNTRIES.		TOTAL.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1884.								
		Dolls.		*Dolls.*		*Dollars.*		*Dollars.*
Codfish, haddock, hake, and pollock, dried, smoked, and cured...... .. pounds..	3, 889, 650	205, 406	1, 057, 052	70, 961	8, 095, 551	422, 448	14, 929, 123	734, 946
Mackerel, pickled....barrels..	4, 244	34, 845	934	12, 255	6, 981	55, 032	13, 102	107, 950
Salmon:								
Canned..................	....	223	....	11, 820	....	92, 551	....	2, 323, 026
Other..................	....	101	....	6, 584	....	25, 071	....	110, 531
Fish, fresh. n. e. s ....pounds..	312	43	....	....	287, 580	19, 634	1, 641, 061	62, 009
Fish, dried, smoked, and cured, n. e. s .... pounds..	595, 545	21, 513	241, 650	21, 455	3, 558, 499	146, 484	7, 174, 332	415, 006
Fish, pickled, n. e. s..barrels..	15, 086	94, 010	233	1, 599	11, 034	64, 125	31, 932	188, 946
Shell-fish:								
Oysters	....	1, 105	....	2, 971	....	74, 799	....	572, 487
Other..................	....	61	....	7, 630	....	56, 275	....	228, 030
Whale and fish oil...gallons..	94	40	245	126	150, 532	79, 189	488, 915	190, 704
Total value of domestic fish ..	....	357, 347	....	135, 401	....	1, 035, 608	....	4, 933, 635
Total value of foreign fish	....	135	....	6, 277	....	225, 612	....	408, 110
1885.								
Codfish, haddock, hake, and pollock, dried, smoked, and cured............. pounds..	6, 506, 931	250, 416	1, 547, 328	97, 601	9, 138, 995	334, 162	18, 178, 987	724, 858
Mackerel, pickled....barrels..	11, 468	61, 013	1, 698	20, 666	9, 842	50, 034	24, 512	139, 663
Salmon:								
Canned..................	....	577	....	18, 542	....	117, 104	....	2, 260, 567
Other..................	....	319	....	6, 830	....	22, 951	....	82, 114
Fish, fresh, n. e. s....pounds	....	....	....	....	140, 769	7, 275	1, 035, 242	33, 350
Fish, dried, smoked, and cured, n. e. s ....pounds..	1, 081, 136	31, 601	321, 273	24, 881	2, 425, 432	98, 645	6, 517, 597	354, 257
Fish, pickled, n. e. s..barrels..	19, 913	93, 653	246	1, 412	12, 643	56, 951	35, 492	170, 597
Shell-fish:								
Oysters..................	....	260	....	3, 822	....	64, 393	....	715, 619
Other..................	.....	47	....	14, 590	....	115, 757	....	411, 984
Whale and fish oil...gallons.	261	99	....	....	384, 127	135, 111	977, 768	321, 227
Total value of domestic fish ..	....	437, 985	....	188, 344	....	1, 002, 383	....	5, 214, 146
Total value of foreign fish ...	....	86	....	4, 220	....	191, 999	....	257, 348
1886.								
Codfish, haddock, hake, and pollock, dried, smoked, and cured..............pounds..	6, 591, 180	241, 899	1, 670, 038	101, 386	6, 963, 604	236, 856	15, 064, 195	602, 934
Mackerel, pickled....barrels..	12, 851	57, 410	2, 757	21, 805	12, 605	72, 610	28, 505	143, 847
Salmon:								
Canned..................	....	132	....	17, 165	....	72, 604	....	1, 875, 109
Other..................	....	503	....	6, 785	....	12, 277	....	43, 450
Fish, fresh, n. e. s ....pounds..	....	......	....	....	59, 653	3, 510	913, 114	29, 734
Fish, dried, smoked, and cured, n. e. s ....pounds..	1, 133, 425	32, 542	270, 442	19, 176	2, 182, 743	79, 111	5, 644, 202	287, 377
Fish, pickled, n. e. s..barrels..	18, 345	76, 203	604	3, 404	10, 011	50, 208	30, 866	144, 341
Shell-fish:								
Oysters..................	....	381	....	3, 993	....	59, 575	....	732, 019
Other..................	....	81	....	14, 255	....	49, 749	....	350, 090
Whale and fish oil...gallons..	193	67	141	62	743, 818	223, 342	1, 184, 871	361, 171
Total value of domestic fish ..	....	409, 278	....	188, 037	....	849, 851	....	4, 570, 072
Total value of foreign fish	....	58, 384	....	4, 341	....	155, 326	....	281, 046

No. 62.—STATEMENT of the PRODUCTS of the AMERICAN WHALE FISHERIES brought into the United States for each of the Years ending June 30, from 1869 to 1886, inclusive.

YEARS ENDING JUNE 30—	OILS.				Whalebone or baleen, split or unsplit.		Ambergris.		Other whale products.	Other products of the American whale fisheries.	TOTAL VALUE.
	Sperm.		Other whale.								
	Galls.	*Dolls.*	*Galls.*	*Dolls.*	*Lbs.*	*Dolls.*	*Lbs.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*
1869	1,448,919	2,733,641	1,278,715	2,267,026	671,064	633,368	......	......	21,846	96	5,655,977
1870	1,723,563	2,652,676	2,302,953	1,785,815	610,199	531,797	......	......	110	333	4,970,731
1871	1,327,984	1,645,117	2,215,085	1,303,645	652,781	421,785	......	......	410	181	3,371,138
1872	1,419,588	1,884,891	1,071,841	655,027	107,705	119,109	......	......	......	185	2,660,112
1873	1,486,016	2,113,494	1,512,296	876,140	391,060	336,704	......	......	457	1,432	3,328,227
1874	879,839	1,250,987	1,377,401	775,919	342,221	264,990	......	......	......	......	2,291,896
1875	1,090,951	1,723,119	1,414,186	847,530	328,217	270,089	5	50	......	214	2,841,002
1876	1,281,635	1,884,229	1,112,861	629,398	210,415	221,548	15	1,451	......	750	2,737,379
1877	1,337,074	1,739,821	802,973	498,266	105,949	204,301	......	......	......	50	2,442,438
1878	1,300,959	1,330,266	977,671	457,851	266,293	401,467	132	21,000	......	......	2,213,584
1879	1,285,454	1,100,004	1,091,930	451,450	228,486	412,489	81	8,781	2,300	2,087	1,977,111
1880	1,119,685	1,025,634	1,238,877	520,245	293,196	492,624	5,821	8,305	......	600	2,047,408
1881	1,042,294	997,589	1,228,262	416,316	409,262	379,600	7	975	......	50	1,794,530
1882	994,840	928,966	1,359,777	527,922	414,768	439,394	......	......	2,044	4,504	1,902,830
1883	810,959	847,996	946,938	516,182	340,571	478,419	183	23,450	810	17,550	1,884,407
1884	802,117	780,828	604,589	367,513	185,317	352,964	31	4,960	......	11,088	1,517,353
1885	686,525	558,312	1,041,089	437,933	332,556	574,947	......	......	......	2,150	1,573,342
1886	879,676	727,534	995,851	378,077	440,237	638,111	260	15,600	......	8,873	1,768,195

No. 63.—STATEMENT showing, by STATES and CUSTOMS DISTRICTS, the Number and Tonnage of VESSELS of the United States engaged in the COD and MACKEREL FISHERIES, June 30, 1886.

[Prepared by the Bureau of Navigation.]

STATES AND CUSTOMS DISTRICTS IN WHICH DOCUMENTED.	Vessels over 20 tons.		Vessels under 20 tons.		TOTAL.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
MAINE.						
Passamaquoddy	12	628.06	16	215.72	28	843.78
Machias	2	44.52	21	281.64	23	326.16
Frenchman's Bay	26	1,885.88	26	273.22	52	2,159.10
Castine	36	2,513.23	18	2 2.90	54	2,766.12
Bangor	......	....	4	64.55	4	64.55
Belfast	31	1,454.21	29	308.90	60	1,763.11
Waldoborough	50	1,073.92	61	780.98	111	1,854.90
Wiscasset	33	1,991.76	32	351.47	65	2,343.23
Bath	2	144.52	7	65.94	9	210.46
Portland and Falmouth	98	6,346.12	37	528.06	135	6,874.18
Saco	1	52.51	6	51.19	7	103.70
Kennebunk	20	1,346.38	9	93.48	20	1,439.86
York	......	....	3	36.03	3	36.03
Total	311	17,481.10	272	3,304.08	583	20,785.18
NEW HAMPSHIRE.						
Portsmouth	13	540.10	5	74.56	18	614.75
MASSACHUSETTS.						
Newburyport	8	280.47	10	104.47	18	384.94
Gloucester	384	27,838.74	53	631.48	437	28,470.22
Salem and Beverly	9	548.17	12	150.27	21	698.44
Marblehead	17	837.64	12	126.23	29	963.87
Boston and Charlestown	50	3,282.78	13	145.42	63	3,428.20
Plymouth	5	350.86	10	97.33	15	448.19
Barnstable	170	13,739.88	43	500.13	213	14,240.01
Edgartown	......	....	5	34.54	5	34.54
New Bedford	8	408.90	27	279.67	35	688.57
Fall River	......	....	4	45.94	4	45.94
Total	651	47,287.44	189	2,115,48	840	49,402.92

No. 63.—NUMBER and TONNAGE of VESSELS of the UNITED STATES ENGAGED in the COD and MACKEREL FISHERIES, 1886—Continued.

STATES AND CUSTOMS DISTRICTS IN WHICH DOCUMENTED.	Vessels over 20 tons.		Vessels under 20 tons.		TOTAL.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
RHODE ISLAND.						
Providence	......	....	14	126.26	14	126.26
Bristol and Warren	......	....	4	39.48	4	39.48
Newport	15	1,470.20	27	310.12	42	1,780.32
Total	15	1,470.20	45	475.86	60	1,946.06
CONNECTICUT.						
Stonington	23	1,090.08	33	328.56	56	1,418.64
New London	32	1,424.85	24	353.01	56	1,777.86
Total	55	2,514.93	57	681.57	112	3,196.50
NEW YORK.						
New York	19	736.80	44	276.60	63	1,013.40
Sag Harbor	20	3,008.15	20	181.33	40	3,189.48
Total	39	3,744.95	64	457.93	103	4,202.88
NEW JERSEY.						
Great Egg Harbor	......	....	1	17.28	1	17.28
VIRGINIA.						
Cherrystone	1	22.26	......	....	1	22.26
NORTH CAROLINA.						
Beaufort	1	33.22	......	....	1	33.22
FLORIDA.						
Pensacola	10	351.05	3	40.05	13	391.10
CALIFORNIA.						
San Diego	......	....	3	29.14	3	29.14
Wilmington	......	....	1	19.81	1	19.81
San Francisco	......	....	2	13.01	2	13.01
Total	......	....	6	61.96	6	61.96
OREGON.						
Willamette	......	....	1	30.70	1	30.70
Grand total	1,096	73,445.34	643	7,259.47	1,739	80,704.81

SUMMARY BY STATES.

Maine	311	17,481.10	272	3,304.08	583	20,785.18
New Hampshire	13	540.19	5	74.56	18	614.75
Massachusetts	651	47,287.44	189	2,115.48	840	49,402.92
Rhode Island	15	1,470.20	45	475.86	60	1,946.06
Connecticut	55	2,514.93	57	681.57	112	3,196.50
New York	39	3,744.95	64	457.93	103	4,202.88
New Jersey	......	....	1	17.28	1	17.28
Virginia	1	22.26	......	....	1	22.26
North Carolina	1	33.22	......	....	1	33.22
Florida	10	351.05	3	40.05	13	391.10
California	......	....	6	61.96	6	61.96
Oregon	......	....	1	30.70	1	30.70
Grand total	1,096	73,445.34	643	7,259.47	1,739	80,704.81

No. 64.—STATEMENT showing the NUMBER and TONNAGE of VESSELS of the United States engaged in the WHALE FISHERIES, June, 30, 1886.

[Prepared by the Bureau of Navigation.]

PORTS.	No.	Tons.
Boston, Mass	3	286.26
Barnstable, Mass	12	1,107.69
Edgartown, Mass	2	408.50
New Bedford, Mass. (sail)	80	19,939.72
New Bedford, Mass. (steam)	2	790.27
New London, Conn	5	605.92
Total	104	23,138.36

No. 65.—STATEMENT showing the TONNAGE of the United States MERCHANT MARINE employed in the FISHERIES, from 1789 to 1886.

[Prepared by the Bureau of Navigation.]

YEAR ENDING—	WHALE FISHERIES.			COD FISHERIES.			MACKEREL FISHERIES.	Total employed in the fisheries.
	Registered vessels.	Enrolled vessels.	Total.	Enrolled vessels.	Licensed vessels under 20 tons.	Total.	Enrolled vessels.	
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Dec. 31—								
1789	....	....	....	9,062	....	9,062	....	9,062
1790	....	....	....	28,348	....	28,348	....	28,348
1791	....	....	....	32,542	....	32,542	....	32,542
1792	....	....	....	32,062	....	32,062	....	32,062
1793	....	....	....	28,974	1,985	30,959	....	30,959
1794	....	4,129	4,129	17,498	5,550	23,048	....	27,177
1795	....	3,163	3,163	24,887	6,046	30,933	....	34,096
1796	....	2,364	2,364	28,509	6,453	34,962	....	37,326
1797	....	1,104	1,104	33,406	7,222	40,628	....	41,732
1798	......	763	763	35,477	7,269	42,746	....	43,509
1799	5,055	592	5,647	23,933	6,046	29,979	....	35,626
1800	2,814	652	3,466	22,307	7,120	29,427	....	32,893
1801	2,349	736	3,085	31,280	8,102	39,382	....	42,467
1802	2,621	580	3,201	32,988	8,534	41,522	....	44,723
1803	11,247	1,143	12,390	43,416	8,396	51,812	....	64,202
1804	12,016	323	12,339	43,088	8,926	52,014	....	64,353
1805	5,117	898	6,015	48,479	8,986	57,465	....	63,480
1806	9,778	729	10,507	50,353	8,830	59,183	....	69,690
1807	8,144	907	9,051	60,690	9,616	70,306	....	79,357
1808	3,802	724	4,526	43,508	8,400	51,908	....	56,524
1809	3,204	573	3,777	26,110	8,377	34,487	....	38,264
1810	3,250	339	3,589	26,251	8,577	34,828	....	38,417
1811	5,245	54	5,299	34,361	8,873	43,234	....	48,533
1812	1,988	942	2,930	21,822	8,637	30,459	....	33,389
1813	2,153	789	2,942	11,255	8,622	19,877	....	22,819
1814	....	562	562	8,863	8,992	17,855	....	18,417
1815	....	1,230	1,230	26,510	10,427	36,937	....	38,167
1816	....	1,168	1,168	37,879	10,247	48,126	....	49,294
1817	4,874	350	5,224	53,990	10,817	64,807	....	70,031
1818	10,135	615	10,750	58,552	10,555	69,107	....	85,857
1819	31,700	686	32,386	65,045	11,033	76,078	....	108,464
1820	35,391	1,054	36,445	60,843	11,197	72,040	....	108,485
1821	26,071	1,924	27,995	51,352	10,941	62,293	....	90,288
1822	45,449	3,134	48,583	58,405	10,821	69,226	....	117,809
1823	39,918	585	40,503	67,041	11,214	78,255	....	118,758
1824	33,166	180	33,346	68,239	9,208	77,447	....	110,793
1825	35,379	....	35,379	70,626	10,836	81,462	....	116,841
1826	41,757	227	41,984	63,535	10,121	73,656	....	115,640
1827	45,653	339	45,992	73,709	10,230	83,939	....	129,931
1828	54,621	180	54,801	74,765	10,922	85,687	....	140,488
1829	57,284	....	57,284	97,889	3,908	101,797	....	159,081
1830	38,912	793	39,705	58,041	3,515	61,556	35,973	137,234
1831	82,316	481	82,797	57,239	3,739	60,978	46,211	189,986

No. 65.—TONNAGE EMPLOYED IN THE FISHERIES, 1789 to 1886, &c.—Cont'd.

YEAR ENDING—	WHALE FISHERIES.			COD FISHERIES.a			MACKEREL FISHERIES.a	Total employed in the fisheries.
	Registered vessels.	Enrolled vessels.	Total	Enrolled vessels.	Licensed vessels under 20 tons.	Total.	Enrolled vessels.	
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Dec. 31—								
1832	72,869	377	73,246	51,725	3,303	55,028	47,428	175,702
1833	101,158	478	101,636	58,569	4,152	62,721	48,720	213,083
1834	108,060	364	108,424	52,473	3,931	56,404	61,082	225,910
Sept. 30—								
1835b	97,649	....	97,649	72,374	4,964	77,338	64,443	239,420
1836	144,681	1,573	146,254	58,414	4,893	63,307	46,424	255,985
1837	127,242	1,895	129,137	75,055	5,497	80,552	46,811	256,500
1838	119,630	5,230	124,860	63,974	6,090	70,084	56,649	251,593
1839	131,845	440	132,285	65,167	7,091	72,258	35,984	240,527
1840	136,927	....	136,927	67,927	8,109	76,036	28,269	241,232
1841	157,405	....	157,405	60,556	5,996	66,552	11,321	235,278
1842	151,613	377	151,990	49,942	4,863	54,805	16,097	222,892
June 30—								
1843b	152,375	142	152,517	54,901	6,323	61,224	11,776	225,517
1844	168,294	320	168,614	78,179	7,046	85,225	16,171	270,010
1845	190,696	207	190,903	69,826	7,165	76,991	21,414	289,308
1846	186,980	440	187,420	72,516	6,802	79,318	36,463	303,201
1847	193,859	....	193,859	70,178	7,503	77,681	31,451	302,991
1848	192,180	433	192,613	82,652	7,195	89,847	43,558	326,018
1849	180,186	....	180,186	73,882	7,874	81,756	42,942	304,884
1850	146,017	....	146,017	85,646	8,160	93,806	58,112	297,935
1851	181,644	....	181,644	87,476	8,141	95,617	50,539	327,800
1852	193,798	....	193,798	102,659	7,914	110,573	72,546	376,917
1853	193,203	....	193,203	99,990	9,238	109,228	59,850	362,281
1854	181,901	....	181,901	102,194	9,734	111,928	35,041	328,870
1855	186,778	70	186,848	102,928	8,987	111,915	21,625	320,368
1856	189,213	248	189,461	95,816	6,636	102,452	29,887	321,800
1857	195,772	70	195,842	104,573	7,295	111,868	28,328	336,038
1858	198,594	....	198,594	110,896	8,356	119,252	29,594	347,445
1859	185,728	....	185,728	120,577	9,060	129,637	27,070	342,430
1860	166,841	....	166,841	127,508	9,145	136,653	26,111	329,605
1861	145,734	....	145,734	127,311	10,535	137,846	54,795	338,375
1862	117,714	....	117,714	122,863	10,738	133,601	80,596	331,911
1863	99,228	....	99,228	106,560	10,730	117,290	51,019	267,537
1864	95,145	....	95,145	92,745	10,997	103,742	55,499	254,386
1865	84,233	6,283	90,516	59,227	5,958	65,185	41,209	196,910
1866	105,170	....	105,170	42,797	8,845	51,642	46,589	203,401
1867	52,884	....	52,884	36,709	7,858	44,567	31,498	128,449
1868	71,343	....	71,343	74,763	9,124	83,887	....	155,230
1869	70,202	....	70,202	55,165	7,539	62,704	....	132,906
1870	67,954	....	67,954	82,612	8,848	91,460	....	159,414
1871	61,490	....	61,490	82,902	9,963	92,865	....	154,355
1872	51,608	....	51,608	87,403	10,144	97,547	....	149,155
1873	44,755	....	44,755	99,542	9,977	109,519	....	154,274
1874	39,108	....	39,108	68,490	9,800	78,290	....	117,398
1875	38,229	....	38,229	68,703	11,504	80,207	....	118,436
1876	39,116	....	39,116	77,314	10,488	87,802	....	126,918
1877	40,593	....	40,593	79,678	11,407	91,085	....	131,678
1878	39,700	....	39,700	71,560	11,987	83,547	....	123,247
1879	40,028	....	40,028	66,543	13,342	79,885	....	119,913
1880	38,408	....	38,408	64,935	12,603	77,538	....	115,946
1881	38,551	....	38,551	66,365	9,771	76,136	....	114,687
1882	32,802	....	32,802	67,015	10,848	77,863	....	110,665
1883	32,414	....	32,414	84,322	10,716	95,038	....	127,452
1884	27,249	....	27,249	72,609	10,331	82,940	....	110,189
1885	25,184	....	25,184	73,975	8,590	82,565	....	107,749
1886	23,138	....	23,138	73,445	7,260	80,705	....	103,843

a Mackerel fisheries included with cod fisheries since 1867. b Nine months.

No. 66.—The PRODUCTS, &c., of the FISHERIES of the UNITED STATES in 1879.

(From the Census.)

STATES AND TERRITORIES.	GRAND TOTAL.			PERSONS EMPLOYED.	
	Persons employed.	Capital invested.	Value of products.	Fishermen.	Shoremen.
	No.	*Dollars.*	*Dollars.*	*No.*	*No.*
Alabama	635	38,200	119,275	545	90
Alaska	6,130	447,000	2,661,640	6,000	130
California	3,094	1,139,675	1,860,714	2,089	1,005
Connecticut	3,131	1,421,020	1,456,860	2,585	546
Delaware	1,979	268,231	907,695	1,662	317
Florida	2,480	406,117	643,227	2,281	196
Georgia	899	78,770	119,993	809	90
Illinois	300	83,400	60,100	265	35
Indiana	52	20,360	32,740	45	7
Louisiana	1,597	93,621	392,610	1,300	297
Maine	11,071	3,375,994	3,614,178	8,110	2,961
Maryland	26,008	6,342,443	5,221,715	15,873	10,135
Massachusetts	20,117	14,334,450	8,141,750	17,165	2,952
Michigan	1,781	442,665	716,170	1,600	181
Minnesota	35	10,160	5,200	30	5
Mississippi	186	8,800	22,540	110	76
New Hampshire	414	209,465	176,684	376	38
New Jersey	6,220	1,492,202	3,176,580	5,659	561
New York	7,266	2,629,585	4,380,565	5,650	1,616
North Carolina	5,274	506,561	845,695	4,729	545
Ohio	1,046	473,800	518,420	925	121
Oregon	6,835	1,131,350	2,781,024	2,795	4,040
Pennsylvania	552	119,810	320,050	511	41
Rhode Island	2,310	596,678	880,915	1,602	708
South Carolina	1,005	66,275	212,482	964	41
Texas	601	42,400	128,300	491	110
Virginia	18,864	1,914,119	3,124,444	16,051	2,813
Washington	744	30,358	181,372	729	15
Wisconsin	800	222,840	253,100	730	70
New England States	37,043	19,937,607	14,270,393	29,838	7,205
Middle States, exclusive of Great Lake fisheries	14,981	4,426,078	8,676,579	12,584	2,397
Southern Atlantic States	52,418	8,951,725	9,602,737	38,774	13,644
Gulf States	5,131	545,584	1,227,544	4,382	749
Pacific States and Territories	16,803	2,748,383	7,484,750	11,613	5,190
Great Lakes	5,050	1,345,975	1,784,050	4,493	557
The United States	131,426	37,955,349	43,046,053	101,684	29,743

STATES AND TERRITORIES.	APPARATUS AND CAPITAL.						
	Vessels.			Boats.		Value of minor apparatus and outfit.	Other capital, including shore property.
	Number.	Tonnage.	Values.	Number.	Value.		
			Dollars.		*Dollars.*	*Dollars.*	*Dollars.*
Alabama	24	317.20	14,585	119	10,215	7,000	6,400
Alaska	....	....	....	3,000	60,000	7,000	380,000
California	49	5,246.80	535,350	853	91,485	205,840	307,000
Connecticut	291	9,215.95	514,050	1,173	73,585	375,535	457,850
Delaware	69	1,226.00	51,600	839	33,227	70,324	113,080
Florida	124	2,152.97	272,645	1,058	28,508	39,927	65,037
Georgia	1	12.00	450	358	15,425	18,445	44,450
Illinois	3	209.73	8,500	101	2,000	11,900	61,000
Indiana	1	21.90	2,500	15	1,650	20,210	5,000
Louisiana	49	539.69	20,821	165	4,800	18,000	50,000
Maine	606	17,632.65	632,542	5,920	245,624	934,593	1,562,235
Maryland	1,450	43,500.00	1,750,000	2,825	186,448	297,145	4,108,850
Massachusetts	1,054	83,233.17	3,171,189	6,749	351,736	3,528,925	7,282,600
Michigan	36	914.42	98,500	454	10,345	272,920	60,900
Minnesota	1	33.59	5,000	10	900	3,760	500
Mississippi	....	....	....	58	4,600	1,600	2,600
New Hampshire	23	1,019.05	51,500	211	7,780	60,383	89,800
New Jersey	590	10,445.90	545,900	4,065	223,963	232,339	400,000
New York	541	11,582.51	772,600	3,441	269,885	390,200	1,171,900
North Carolina	95	1,457.90	39,000	2,714	123,175	225,436	118,950
Ohio	9	359.51	38,400	487	29,830	253,795	151,775
Oregon	....	....	....	1,360	246,600	245,750	639,000
Pennsylvania	11	321.90	10,500	156	13,272	40,538	55,500
Rhode Island	92	2,502.77	191,850	734	61,245	138,733	204,850

No. 66.—The FISHERIES of the UNITED STATES in 1879—Continued.

STATES AND TERRITORIES.	APPARATUS AND CAPITAL.						
	Vessels.			Boats.		Value of minor apparatus and outfit.	Other capital including shore property.
	Number.	Tonnage.	Values.	Number.	Value.		
			Dollars.		*Dollars.*	*Dollars.*	*Dollars.*
South Carolina	22	337.32	15,000	501	9,790	25,985	15,500
Texas	....	....	....	167	15,000	4,400	23,000
Virginia	1,446	15,578.93	571,000	6,618	292,720	560,763	489,636
Washington	7	216.62	11,100	334	6,610	8,648	4,000
Wisconsin	11	220.25	26,700	319	24,975	145,165	26,000
New England States	2,066	113,602.50	4,562,131	14,787	739,970	5,038,171	9,597,335
Middle States, exclusive of Great Lake fisheries	1,210	23,566.93	1,382,000	8,293	546,647	674,951	1,822,480
Southern Atlantic States	3,014	60,886.15	2,375,450	13,331	640,508	1,145,878	4,789,886
Gulf States	197	3,009.86	308,051	1,252	50,173	52,823	134,537
Pacific States and Territories	56	5,463.42	546,450	5,547	404,695	467,238	1,330,000
Great Lakes	62	1,768,87	183,200	1,594	83,400	766,200	318,175
The United States	6,605	208,297.82	9,357 282	44,804	2,465,393	8,145,261	17,967,413

STATES AND TERRITORIES.	VALUE OF PRODUCTS BY FISHERIES.						
	General fisheries.	Whale fishery.	Seal fishery.	Menhaden fishery.	Oyster fishery.	Sponge fishery.	Marine salt industry.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Alabama	74,325	....	....	....	44,950	....	....
Alaska	564,640	500	2,096,500	....	....	....	....
California	1,341,314	201,650	15,750	....	....	....	302,000
Connecticut	383,887	32,048	111,851	256,205	672,875	....	....
Delaware	309,029	....	....	941	687,725	....	....
Florida	426,527	....	....	....	15,950	200,750	....
Georgia	84,993	....	....	....	35,000	....	....
Illinois	60,100	....	....	....	....	....	....
Indiana	32,740	....	....	....	....	....	....
Louisiana	192,610	....	....	....	200,000	....	....
Maine	3,576,678	....	....	....	37,500	....	....
Maryland	479,388	....	....	11,851	4,730,476	....	....
Massachusetts	5,581,204	2,089,337	....	61,769	405,550	....	3,890
Michigan	716,170	....	....	....	....	....	....
Minnesota	5,200	....	....	....	....	....	....
Mississippi	12,540	....	....	....	10,000	....	....
New Hampshire	170,634	....	....	....	6,050	....	....
New Jersey	949,678	....	....	146,286	2,080,625	....	....
New York	1,689,357	....	....	1,114,158	1,577,050	....	....
North Carolina	785,287	408	....	....	60,000	....	....
Ohio	518,420	....	....	....	....	....	....
Oregon	2,776,724	....	4,300	....	....	....	....
Pennsylvania	132,550	....	....	....	187,500	....	....
Rhode Island	302,242	....	....	221,748	356,925	....	....
South Carolina	192,482	....	....	....	20,000	....	....
Texas	81,000	....	....	....	47,300	....	....
Virginia	602,239	....	....	303,829	2,218,376	....	....
Washington	109,960	....	61,412	....	10,000	....	....
Wisconsin	253,100	....	....	....	....	....	....
New England States	10,014,645	2,121,385	111,851	539,722	1,478,900	....	3,890
Middle States exclusive of Great Lake fisheries	2,882,294	....	....	1,261,385	4,532,900	....	....
Southern Atlantic States	2,217,797	408	....	315,680	7,068,852	....	....
Gulf States	713,594	....	....	....	313,200	200,750	....
Pacific States and Territories	4,792,638	202,150	2,177,963	....	10,000	....	302,000
Great Lakes	1,784,050	....	....	....	....	....	....
The United States	22,405,018	2,323,943	2,289,813	2,116,787	13,403,852	200,750	305,890

No. 66.—The FISHERIES of the UNITED STATES in 1879—Continued.

The volume of the United States Census for 1880, containing the complete fishery statistics, has not yet been published. The following data, however, have been obtained from the Census Bulletins published from time to time. This information is given in five groups, viz:

I.—The New England States.
II.—The Middle Atlantic States.
III.—The Southern Atlantic States.
IV.—The Pacific States and Territories.
V.—The Great Lakes.

No data are accessible as to the fisheries of the Gulf States other than is contained in the preceding table.

I.—THE NEW ENGLAND STATES.

MAINE.

THE SEA FISHERIES.

Quantities and values of sea products as they come from the water.

Kinds of products.	Quantity.	Value.
		Dollars.
Grand total .... pounds..	202, 048, 449	1, 790, 849
First products:		
Mixed fish .... do....	38, 486, 060	297, 216
Cod .... do....	52, 494, 325	419, 955
Hake .... do....	23, 597, 730	58, 904
Haddock .... do....	12, 817, 075	80, 871
Pollock .... do....	5, 220, 000	20, 880
Cusk .... do....	1, 965, 600	14, 742
Mackerel .... do....	28, 594, 455	354, 300
Herring .... do....	21, 455, 192	122, 596
Total fish .... do....	184, 630, 437	1, 369, 554
Lobsters .... pounds..	14, 234, 182	268, 730
Clams .... bush..	*a*318, 383	90, 056
Enhancement in value of Southern oysters	....	37, 500
Other marine products	....	25, 000

a An allowance of 10 pounds of meat is made for each bushel of clams.

Quantities and values of the sea products as put upon the market.

Kinds of products.	Weight when fresh.	Weight when prepared.	Bulk.	Value as sold.
	Pounds.	*Pounds.*		*Dollars.*
Grand total	202, 048, 449	....	....	3, 614, 178
Fresh fish.				
For food	16, 597, 300	....	....	207, 965
For bait	17, 330, 000	....	86, 650 barrels........	64, 988
For fertilizer	2, 790, 000	....	13, 950 barrels........	6, 575
Total	36, 717, 300	....	....	279, 528
Dry fish.				
Cod	52, 494, 325	18, 090, 352	....	565, 325
Hake	23, 597, 730	9, 788, 688	....	131, 098
Haddock	9, 917, 775	3, 526, 320	....	70, 841
Pollock	5, 220, 000	2, 016, 000	....	36, 000
Cusk	1, 965, 600	846, 720	....	20, 790
Total	93, 195, 430	34, 268, 080	....	824, 054

No. 66.—The FISHERIES of the UNITED STATES in 1879—MAINE—Cont'd.

Quantities and values of the sea products as put upon the market—Continued.

Kinds of products.	Weight when fresh.	Weight when prepared.	Bulk.	Value as sold.
Pickled fish.	*Pounds.*	*Pounds.*		*Dollars.*
Mackerel	27,342,000	18,228,000	91,140 barrels	524,055
Herring:				
Ordinary	6,116,250	4,893,000	24,465 barrels	73,395
Russian sardines and anchovies	2,703,625	1,673,000	8,365 barrels	29,078
Miscellaneous	1,747,100	1,035,400	5,177 barrels	25,885
Total	37,908,975	25,829,400	129,147 barrels	652,413
Smoked fish.				
Herring:				
Ordinary	3,751,942	2,710,778	318,915 boxes	63,783
Bloaters	2,387,000	1,723,333	51,700 boxes	36,190
Haddock (Finnan haddies)	2,899,300	1,414,500		78,175
Total	9,038,242	5,848,611		178,148
Canned fish.				
Mackerel	1,252,455		814,668 cans	96,749
Herring (sardines)	6,496,375		7,500,084 cans	772,176
Miscellaneous	21,660		12,996 cans	1.928
Total	7,770,490		8,327,748 cans	870,853
Lobsters.				
Fresh	4,739,898			173,796
Canned	9,494,284		1,831,201 cans	238,280
Total	14,234,182			412,076
Clams.				
For food	1,090,810		109,081 bushels	38,178
For bait	1,781,640		178,164 bushels=12,726 barrels	63,630
Canned	311,380		31,138 bushels=456,028 cans	47,318
Total	3,183,830			149,126
Miscellaneous.				
Fish-oil			168,732 gallons	67,492
Sounds		131,098		117,988
Marine products used for fertilizers.				25,000
Enhancement in value of Southern oysters in transporting and transplanting.				37,500
Total				247,980

THE RIVER FISHERIES.

Quantities and values of the more important species, and the total quantity and value of the products.

Kinds of products.		Quantity.	Value as sold.
Total fresh fish:			*Dollars.*
Taken	pounds	4,730,244	
As sold	do	3,794,180	125,046
Salmon	number	10,064	21,859
Shad:			
Used fresh	number	132,801	
Salted	barrels	384	11,876
Alewives:			
Used fresh	number	660,663	
Smoked	do	2,738,820	35,623
Salted	barrels	3,500	
Bass	pounds	26,700	2,568
Smelt	do	809,685	44,057
Tom-cod	do	328,500	1,486
Eels	do	112,625	6,777
Sturgeon	do	a12,500	600

a Equal to 250 in number.

No. 66.—The FISHERIES of the UNITED STATES in 1879—MAINE—Cont'd.

Summary of the quantity of each of the various kinds of fish and other aquatic species taken, and the value of same after preparation for the market.

Kinds of products.	For food.				
	Used fresh.	Used for drying.	Used for pickling.	Used for smoking.	Used for canning.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Total	24,273,974	93,195,430	39,424,093	10,407,402	17,576,154
Alewives	330,042		1,050,000	1,369,160	
Bass	26,760				
Clams *a*	1,090,810				311,380
Cod	3,100,000	52,494,325	400,000		10,000
Cunners	100,000				
Cusk		1,965,600			
Eels	112,625				
Flounders	447,300				
Haddock	4,000,000	9,917,775	900,000	2,899,300	11,660
Hake	700,000	23,597,730	150,090		
Halibut	600,000				
Herring	4,300,000		8,819,875	6,138,942	6,496,375
Lobster	4,739,898				9,494,284
Mackerel	3,000,000		27,342,000		1,252,455
Mussels					
Oysters *g*					
Pollock	300,000	5,220,000			
Salmon	110,704				
Sculpins					
Seaweed (numerous species)					
Shad	115,200		465,118		
Silver hake					
Smelts	809,635				
Sturgeon	12,500				
Swordfish	50,000		297,100		
Tomcod	328,500				

Kinds of products.	For other purposes.		Total for food and other purposes.	
	Used for bait.	Used for fertilizer.	Fresh.	Value as sold.
	Pounds.	*Pounds.*	*Pounds.*	*Dollars.*
Total	19,111,640	2,790,000	206,778,693	3,739,224
Alewives	500,000		*b*3,249,220	38,823
Bass			26,760	2,568
Clams *a*	*c*1,781,640		3,183,830	149,126
Cod			56,004,825	*d*656,753
Cunners	440,000		540,000	3,200
Cusk			1,965,600	20,790
Eels			112,625	6,777
Flounders	4,238,000	190,000	4,875,300	16,088
Haddock			17,728,735	*e*225,393
Hake			24,447,730	*f*278,336
Halibut			600,000	26,000
Herring	7,000,000	1,940,000	34,695,192	1,043,722
Lobster			14,234,182	412,076
Mackerel	100,000		31,694,455	659,304
Mussels				10,000
Oysters *g*				37,500
Pollock			5,520,000	38,000
Salmon			110,704	21,850
Sculpins	4,600,000		4,600,000	11,500
Seaweed (numerous species)				15,000
Shad			580,318	11,876

a The meats of the clams alone are considered, 10 pounds of meats being allowed for each bushel of clams in the shell.

b 500,000 pounds of alewives are taken in the weirs and pounds along the outer shore and sold to the boat and vessel fishermen for bait. These are classed as sea products, the remaining 2,749,202 being included with the river products.

c The clams used for bait are salted, and are therefore included with pickled products in Table VII.

d Including $40,000 for oil.

e Including $7,492 for oil.

f Including $20,000 for oil and $117,988 for sounds.

g Few, if any, native oysters are found in the State, but Chesapeake Bay oysters are brought direct to Portland in vessels; 75,000 bushels were handled in 1880, the $37,500 representing the enhancement in value in transporting and transplanting.

No. 66.—The FISHERIES of the UNITED STATES in 1879—MAINE—Continued.

Showing the quantity of each of the various kinds of fish and other aquatic species taken, and the value of same after preparation for the market—Continued.

Kinds of products.	For other purposes.		Total for food and other purposes.	
	Used for bait.	Used for fertilizer.	Fresh.	Value as sold.
	Pounds.	*Pounds.*	*Pounds.*	*Dollars.*
Silver hake	400,000	350,000	750,000	1,300
Smelts			809,035	44,057
Sturgeon			12,500	600
Swordfish			347,100	6,215
Tomcod	52,000	310,000	a600,500	2,361

[a] The tomcod used for food are taken by the river fishermen, while those used for bait and fertilizer are captured in the weirs along the outer shore. The former are classed with the river and the latter with the sea products.

NOTE.—In this table the total "catch" for each species is given separately. The figures, in many instances, do not agree with the totals for the different species as shown in the preceding table of sea products, as all fish, of whatever kind, sold fresh for food, bait, or fertilizer, as well as the miscellaneous pickled and canned fish, are there, for convenience, classed as "mixed fish." In the 38,486,000 pounds there shown as mixed fish are included 3,510,000 pounds of cod, 850,000 pounds of hake, 4,911,660 pounds of haddock, 300,000 pounds of pollock, 3,100,000 pounds of mackerel, 13,240,000 pounds of herring, 500,000 pounds of alewives, 540,000 pounds of cunners, 4,875,300 pounds of flounders, 600,000 pounds of halibut, 4,600,000 pounds of sculpins, 750,000 pounds of silver hake, 347,100 pounds of swordfish, and 362,000 pounds of tomcod.

MASSACHUSETTS.

Quantities and values of fish taken, and quantity and value of fresh fish consumed.

Kinds of products.	Taken.		Consumed.	
	Quantities.	Values.	Quantities.	Values.
FRESH FISH.	*Pounds.*	*Dollars.*	*Pounds.*	*Dollars.*
Total	a341,935,982	3,494,910	124,101,621	1,608,523
Alewives	3,751,050	28,635	b2,512,134	16,246
Bass:				
Sea	80,550	4,833	80,550	4,833
Striped	287,955	28,796	287,955	28,796
Bluefish	4,273,841	127,683	4,238,234	127,147
Bonito	97,000	2,910	97,000	2,910
Butter-fish	5,000	150	5,000	150
Cod	172,216,955	1,544,311	23,796,570	356,948
Cunners	160,500	803	160,500	803
Cusk	989,194	7,253	334,144	2,340
Eels	395,100	19,755	395,100	19,755
Flounders	571,470	8,572	571,470	8,572
Frost-fish	67,434	1,349	67,434	1,349
Haddock	24,092,890	295,210	21,226,371	282,311
Hake	8,437,749	25,019	1,378,280	8,270
Halibut	14,205,910	369,840	9,111,210	318,893
Herring	7,794,780	62,998	c3,827,124	38,200
Mackerel	61,422,608	781,290	16,806,308	224,720
Mackerel, Spanish	60	9	60	9
Menhaden	26,066,077	39,677	d26,066,077	39,677
Perch	83,574	1,007	83,574	1,007
Pollock	4,754,495	19,018	1,100,736	4,403
Salmon	220	33	220	33
Scup	1,022,180	30,665	1,022,180	30,665
Shad	164,524	8,220	164,524	8,226
Smelts	35,006	876	35,006	876
Squeteague	103,810	3,616	103,810	3,616
Sturgeon	9,650	290	9,650	290
Swordfish	731,950	19,203	514,950	15,942
Tautog	373,335	13,067	373,335	13,067
Mixed fish	9,791,600	49,057	9,602,000	48,463

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[a] It is estimated that 39,855,000 pounds of mackerel and other fish were caught and thrown away as useless, the mackerel being too small for sale in fresh or pickled state. In 1880 and 1881 several million pounds of such mackerel were canned and found a ready sale.

[b] 1,774,995 pounds used for bait; 937,139 pounds used for food.

[c] 2,610,514 pounds used for bait; 1,216,610 pounds used for food.

[d] 25,811,573 pounds used by menhaden oil factories; 254,504 pounds used for bait.

No. 66.—The FISHERIES of the UNITED STATES in 1879—MASSACHUSETTS—Continued.

Quantities and values of fish taken, and quantity and value of fresh fish consumed—Cont'd.

Kinds of products.	Weight of fish when fresh.		Weight of fish when preserved.		Enhancement of value.
	Quantities.	Values.	Quantities.	Values.	
DRIED FISH.	*Pounds.*	*Dollars.*	*Pounds.*	*Dollars.*	*Dollars.*
Total	162, 562, 673	1, 230, 609	a62, 122, 008	b2, 412, 077	b1, 175, 378
Cod	148, 327, 885	1, 886, 623	56, 054, 757	2, 176, 881	990, 258
Cusk	655, 050	4, 913	327, 525	11, 466	6, 553
Haddock	2, 866, 519	12, 899	1, 089, 137	27, 770	14, 871
Hake	7, 059, 460	17, 649	3, 181, 206	65, 182	47, 533
Pollock	3, 653, 759	14, 615	1, 469, 293	26, 778	12, 163
PICKLED FISH.					
Total	50, 049, 488	598, 326	34, 006, 745	928, 303	329, 977
Alewives	972, 050	9, 720	777, 650	15, 553	5, 833
Bluefish	29, 607	296	18, 220	455	159
Cod	92, 500	740	46, 250	1, 156	416
Herring	3, 967, 656	24, 708	3, 174, 125	47, 612	22, 814
Mackerel	44, 526, 300	556, 579	29, 684, 200	853, 420	296, 841
Swordfish	217, 000	3, 255	124, 000	4, 030	775
Mixed fish	90, 000	504	66, 000	1, 050	1, 056
Halibut fins	32, 875	657	20, 300	1, 052	395
Tongues and sounds	112, 500	1, 687	90, 000	3, 375	1, 088
SMOKED FISH.					
Total	5, 367, 575	53, 706	1, 435, 800	105, 997	52, 291
Alewives	266, 875	2, 669	160, 125	4, 003	1, 334
Bluefish	6, 000	90	2, 000	100	10
Halibut	5, 094, 700	50, 947	1, 273, 675	101; 894	50, 947

a Weight of the dried fish when whole; 5,000,000 pounds may be deducted for about 23,000,000 prepared as boneless.

b Includes $104,000 enhancement on boneless fish.

Miscellaneous products.

Kinds of products.		Quantity.	Value.
			Dollars.
Lobsters	pounds	4, 315, 416	158, 229
Oysters	bushels	86, 000	405, 550
Clams	do	158, 626	70, 195
Quahaug and sea-clams	do	11, 050	5, 525
Scallops	gallons	7, 028	3, 514
Squid	barrels	1, 125	6, 750
Fish oil	gallons	333, 699	144, 208
Fish guano	tons	6, 271	32, 152
Fish spawn	barrels	3, 725	12, 105
Fish sounds (dried)	pounds	124, 000	70, 820
Marine salt	tons	346	3, 890
Irish moss	pounds	465, 000	16, 275
Sea-weed	tons	4, 000	4, 000
Total			a937, 513

a Includes $58,300, the value of fish balls, smelts, &c., packed in Boston.

Products of the whale fishery.

Kinds of products.		Quantity.	Value.
			Dollars.
Sperm oil	gallons	1, 299, 469	1, 199, 450
Whale oil	do	698, 442	297, 899
Whalebone	pounds	256, 454	570, 845
Ivory	do	19, 100	5, 921
Ambergris	do	62	6, 225
Total			2, 089, 337

No. 66.—The FISHERIES of the UNITED STATES in 1879.—MASSACHUSETTS—Continued.

Recapitulation, by customs districts, of total quantities and values of Sea Products, as placed upon the markets.

Customs districts.	Total.						Fresh fish.	
	Value of sea products as sold.	Fresh fish taken.	Value of fish when fresh.	Fish as sold.	Value of fish as sold.	Enhancement in value of fish in process of preparation.	Quantity.	Value.
	Dollars.	*Pounds.*	*Dollars.*	*Pounds.*	*Dollars.*	*Dollars.*	*Pounds.*	*Dollars.*
Total	8,141,750	a341,935,982	3,494,910	221,666,174	5,054,900	b1,557,646	124,101,621	1,608,523
Newburyport	140,681	8,200,344	93,549	6,062,259	118,521	24,972	4,240,209	59,725
Gloucester	3,155,071	189,383,026	1,948,406	106,116,499	2,948,309	998,466	44,048,606	727,099
Salem	117,444	5,417,800	49,242	2,576,100	71,272	22,030	830,500	10,579
Marblehead	230,942	15,243,616	170,373	11,249,219	211,849	41,476	8,491,925	119,036
Boston	1,026,360	30,147,534	358,229	26,678,891	524,601	165,465	20,709,866	256,268
Plymouth	138,443	6,618,893	61,413	3,952,888	89,630	28,217	2,167,000	26,256
Barnstable	1,051,619	51,223,687	604,860	31,779,339	853,776	248,916	12,560,976	238,627
Nantucket	29,546	1,620,189	21,807	1,017,820	27,462	5,655	609,420	14,520
Edgartown	133,797	3,071,092	47,733	2,338,258	55,366	7,633	1,814,818	37,837
New Bedford	2,053,944	17,253,887	106,290	16,309,987	117,024	10,734	15,575,387	92,586
Fall River	63,903	13,755,914	33,008	13,584,914	37,090	4,082	13,052,914	25,990

Customs districts.	Dried fish.		Pickled fish.		Smoked fish.		Miscellaneous products.	Products of the whale fishery.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.		
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*	*Pounds.*	*Dollars.*	*Dollars.*	*Dollars.*
Total	62,122,008	2,412,077	34,006,745	928,303	1,435,800	105,997	c997,513	2,089,337
Newburyport	1,239,850	42,385	572,200	15,611	10,000	800	22,160	....
Gloucester	42,850,143	1,634,103	17,967,750	487,107	1,250,000	100,000	205,762	1,000
Salem	1,450,400	52,214	295,200	8,479	....	....	46,172	....
Marblehead	2,662,294	90,526	95,000	2,287	....	....	19,093	....
Boston	750,000	d104,000 23,821	5,219,025	140,512	....	....	c186,321	15,438
Plymouth	1,777,888	63,144	8,000	230	....	....	48,813	....
Barnstable	9,931,518	351,556	9,261,170	262,190	25,675	1,394	69,367	128,476
Nantucket	392,000	12,514	14,400	328	2,000	100	2,084	....
Edgartown	461,315	15,976	4,000	100	58,125	1,453	31,017	47,414
New Bedford	606,000	21,838	128,000	2,600	....	....	39,911	1,897,009
Fall River	....	....	442,000	8,850	90,000	2,250	26,813	....

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a 30,855,000 additional pounds of fish taken but not utilized.

b About 60 per cent. of this enhancement may be credited to the vessel industry, and 40 per cent. to the shore industry.

c Includes 264,000 cans fish-balls, $38,500; 38,400 cans smelts, $4,800; 36,000 cans fish-chowder, $7,500; 30,000 cans clam-chowder, $7,500; total value, $58,300.

d Enhancement on fish prepared as "boneless" in Boston, but accounted for elsewhere.

No. 66.—The FISHERIES of the UNITED STATES IN 1879—NEW HAMPSHIRE and RHODE ISLAND.

NEW HAMPSHIRE.

Quantities and values of the fishery products as fresh and as prepared.

Kinds of products.	Weight of fish when fresh.	Weight of fish when prepared.	Bulk.	Value.
	Pounds.	*Pounds.*		*Dollars.*
Grand total	10,400,294			170,684
Fresh fish.				
For food	4,395,134			63,575
For bait and fertilizers	200,000		1,000 barrels	375
Total	4,595,134			63,950
Cured fish.				
Dry fish	2,794,210	1,066,700		33,920
Pickled fish	2,573,350	1,741,400		48,434
Total	5,367,560	2,808,100		82,354
Shell-fish.				
Lobsters	250,000			7,500
Clams	179,600		17,960 bushels	8,980
Oysters	8,000		1,000 bushels	a6,050
Total	437,600			22,530
Miscellaneous.				
Fish oil			8,900 gallons	6,500
Fish sounds		1,500		1,350
Total				7,850

a Includes $5,250 enhancement in value of Southern oysters.

NOTE.—The proportion of different species included in the fresh and cured fish is estimated as follows: Alewives, 425,000 pounds; cod, 5,447,507 pounds; cusk, 38,000 pounds; haddock, 641,347 pounds; hake, 807,500 pounds; halibut, 25,000 pounds; herring, 108,750 pounds; mackerel, 2,573,000 pounds; pollock, 75,500 pounds; swordfish, 20,000 pounds; mixed fish, 208,000 pounds,

RHODE ISLAND.

Quantities and values of the fishery products as fresh and as prepared.

Kinds of products.	Weight of fish when fresh.	Weight of fish when prepared.	Bulk.	Value.
	Pounds.	*Pounds.*		*Dollars.*
Grand total	88,049,978			880,915
Fresh fish.				
For food	a10,838,328			184,482
For bait and fertilizers	1,355,000		6,775 barrels	2,432
Total	12,193,328			186,914
Cured fish.				
Dry cod	1,931,800	768,720		26,270
Pickled alewives	505,000	404,000		6,060
Smoked alewives	2,333,000	1,400,000		7,000
Total	4,769,800	2,572,720		39,330
Shell-fish.				
Lobsters	423,250			15,871
Clams	539,600		53,960 bushels	48,564
Scallops	124,600		17,800 gallons	8,900
Oysters	1,305,600		163,200 bushels	b356,925
Total	2,393,050			430,260
Miscellaneous.				
Menhaden, for oil and scrap	68,693,800		270,482 gallons oil; 10,590 tons scrap.	221,748
Cod oil			3,250 gallons	1,300
Squeteague sounds		400		163
Irish moss			400 barrels	1,200
Total	68,693,800			224,411

a The proportion of different kinds of fish in this quantity is estimated as follows: Alewives, 140,000 pounds; sea bass, 197,000 pounds; striped bass, 292,000 pounds; blackfish or tautog, 468,000 pounds; bluefish, 738,000 pounds; cod, 652,000 pounds; eels, 272,500 pounds; flounders and flatfish, 352,400 pounds; mackerel, 89,000 pounds; white and yellow perch, 30,000 pounds; salmon, 400 pounds; scup or porgy, 6,691,178 pounds; shad, 48,100 pounds; smelts, 95,000 pounds; squeteague, 326,000 pounds; swordfish, 90,000 pounds; mixed fish, 356,750 pounds.

b Includes $131,425 enhancement on 274,300 bushels of Southern oysters.

No. 66.—The FISHERIES of the UNITED STATES in 1879—CONNECTICUT.

CONNECTICUT.

Quantities and values of the fishery products as fresh and as prepared.

Kinds of products.	Weight of fish when fresh.	Weight of fish when prepared.	Bulk.	Value.
	Pounds.	*Pounds.*		*Dollars.*
Grand total	83, 509, 367			1, 456, 866
Fresh fish.				
For food	a7, 884, 982			280, 960
For bait and fertilizers	4, 600, 000		23, 000 barrels	7, 500
Total	12, 484, 982			288, 460
Pickled fish.				
Alewives	500, 000	400, 000		6, 000
Mackerel	1, 266, 900	844, 600		24, 282
Total	1, 766, 900	1, 244, 600		30, 282
Shell-fish.				
Lobsters	723, 885			27, 145
Clams	750, 000		75, 000 bushels	38, 000
Oysters	2, 691, 600		336, 450 bushels	b672, 875
Total	4, 165, 485			738, 020
Miscellaneous.				
Menhaden, for oil and scrap	65, 092, 000		256, 300 galls. oil; 9,000 tons scrap	256, 205
Whale oil			22, 144 gallons	11, 248
Whalebone			10, 400 pounds	20, 800
Sea-elephant oil			42, 000 gallons	21, 420
Fur-seal skins			9, 275 skins	90, 431
Total	65, 092, 000			400, 104

a The proportion of different kinds of fish in this amount is estimated as follows: Alewives, 270,000 pounds; sea bass, 351,900 pounds; striped bass, 36,900 pounds; blackfish, or tautog, 173,550 pounds; bluefish, 514,500 pounds; cod, 2,738,000 pounds; eels, 80,250 pounds; flounders and flat-fish, 142,600 pounds; halibut, 830,000 pounds: mackerel, 37,000 pounds; pollock, 20,000 pounds; scup or porgy, 930,000 pounds; shad, 1,318,032 pounds; smelts, 27,000 pounds; squeteague, 102,750 pounds; swordfish, 73,500 pounds; mixed fish, 239,000 pounds.

b Includes $286,250 enhancement on 515,000 bushels of Southern oysters.

II.—THE MIDDLE ATLANTIC STATES.

THE SEA FISHERIES.

Quantities of sea products, exclusive of oysters, and the value of same to the fishermen, by States.

States.	Grand total.		Fish for food.				
			Sold fresh.		Salted.		
	Sea products taken.	Value of same to fishermen.	Quantity.	Value to fishermen.	Fresh used.	Salted.	Value to fishermen.
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*	*Pounds.*	*Barrels.*	*Dollars.*
Total	373, 179, 912	3, 687, 078	40, 185, 226	1, 839, 726	474, 000	1, 580	9, 480
New York	318, 482, 473	2, 483, 695	21, 536, 300	725, 928	90, 000	300	1, 800
New Jersey	48, 574, 486	1, 004, 529	13, 396, 226	436, 025	135, 000	450	2, 700
Pennsylvania	600, 000	36, 000	600, 000	36, 000			
Delaware	5, 522, 953	162, 854	4. 652, 700	141, 773	249, 000	830	4, 980

No. 66.—The FISHERIES of the UNITED STATES in 1879—THE MIDDLE ATLANTIC STATES—Continued.

Quantities of sea products, exclusive of oysters, &c., by States—Continued.

States.	Refuse fish for oil and fertilizers.				Terrapin.		
	Fish taken.	Oil produced.	Scrap produced.	Value of products as sold.	Number.	Estimated weight.	Value to fishermen.
	Pounds.	*Gallons.*	*Tons.*	*Dollars.*		*Pounds.*	*Dollars.*
Total	319,005,700	1,274,579	36,770	1,262,210	13,836	41,508	6,918
New York	288,891,200	1,186,682	32,210	1,114,158	600	1,800	300
New Jersey	29,614,600	87,447	4,545	147,111	3,000	9,000	1,500
Pennsylvania	....	....	....	....	....	....	....
Delaware	*a*499,900	450	15	941	10,236	30,708	5,118

States.	Lobsters.		Soft crabs.			Hard crabs.		
	Quantity.	Value to fishermen.	Number.	Estimated weight.	Value to fishermen.	Number.	Estimated weight.	Value to fishermen.
	Pounds.	*Dollars.*		*Pounds.*	*Dollars.*		*Pounds.*	*Dollars.*
Total	291,950	10,948	4,161,030	1,387,013	173,376	5,378,463	1,792,821	66,850
New York	135,000	5,062	285,000	95,000	11,875	4,588,750	1,529,583	57,350
New Jersey	156,800	5,880	3,684,900	1,228,300	153,537	726,000	242,000	9,075
Pennsylvania	....	....	....	....	....	....	....	....
Delaware	150	6	191,139	63,713	7,964	63,718	21,238	425

States.	Clams.						Value to fishermen of miscellaneous and secondary products.
	Soft clams.			Quahaugs.			
	Quantity.	Estimated weight shelled.	Value to fishermen.	Quantity.	Estimated weight shelled.	Value to fishermen.	
	Bushels.	*Pounds.*	*Dollars.*	*Bushels.*	*Pounds.*	*Dollars.*	*Dollars.*
Total	406,803	4,068,030	288,595	741,708	5,933,664	458,224	70,742
New York	340,775	3,407,750	255,581	349,480	2,795,840	262,110	*b*49,522
New Jersey	66,028	660,280	33,014	391,535	3,132,280	195,767	19,920
Pennsylvania	....	....	....	....	....	....	....
Delaware	....	....	....	693	5,544	347	1,300

a Of this, 402,402 pounds (2,012 barrels), valued at $604, were composted.
b Including scallops and mussels for food, valued at $14,222.

THE RIVER AND LAKE FISHERIES.

Quantities of the river and lake products taken, and the value of same to the fishermen, by States.

States.	Grand total.		Alewives.		Shad.	
	Pounds.	Value to fishermen.	Pounds.	Value to fishermen.	Pounds.	Value to fishermen.
	Quantity.	*Dollars.*	*Quantity.*	*Dollars.*	*Quantity.*	*Dollars.*
Total	17,117,850	654,921	*a*3,250,000	47,085	5,093,200	252,160
New York	7,737,600	319,820	250,000	3,750	2,733,600	136,680
New Jersey	2,752,000	91,435	*a*1,200,000	17,335	750,000	35,000
Pennsylvania	2,333,000	96,550	....	....	559,600	27,980
Delaware	4,295,250	147,116	*a*1,800,000	26,000	1,050,000	52,500

No. 66.—The FISHERIES of the UNITED STATES in 1879—THE MIDDLE ATLANTIC STATES—Continued.

Quantities of river and lake products taken, &c., by States—Continued.

States.	Sturgeon.		Mixed river fish.		Lake fish.	
	Pounds.	Value to fishermen.	Pounds.	Value to fishermen.	Pounds.	Value to fishermen.
	Quantity.	*Dollars.*	*Quantity.*	*Dollars.*	*Quantity.*	*Dollars.*
Total	1,044,000	53,640	2,407,650	103,716	5,323,000	198,320
New York	144,000	8,640	540,000	15,880	4,070,000	154,870
New Jersey	300,000	15,000	502,000	24,100	....	....
Pennsylvania	150,000	7,500	370,400	17,620	1,253,000	43,450
Delaware	450,000	22,500	b995,250	46,116	....	....

a Including those salted for market and for home supply.
b Including 3,060 turtle, averaging 5 pounds apiece, worth $918.

THE OYSTER INDUSTRY.

Quantity of native oysters produced and the value of same to producer; also the quantity rehandled and the enhancement in value in preparation for the markets, by States.

States.	Native oysters produced.	Value of native oysters to fishermen.	Enhancement in value of other oysters in preparation for market.a		Total value of oysters as sold.
			Rehandled.	Amount of enhancement.	
	Bushels.	*Dollars.*	*Bushels.*	*Dollars.*	*Dollars.*
Total	b3,318,300	3,338,300	2,387,000	1,194,600	4,532,900
New York	1,043,800	1,043,300	1,065,000	533,750	1,577,050
New Jersey	1,975,000	1,970,000	237,500	110,625	2,080,625
Pennsylvania	....	....	250,000	187,500	187,500
Delaware	300,000	325,000	834,500	362,725	687,725

a This includes the transportation of oysters from distant waters or to other markets in oyster vessels; also the increase in value due to planting, fattening, and canning.
b Each bushel of oysters is estimated to yield 7 pounds of meats.

Summary, by States, of the quantities of fishery products, and the value of same to the producers.

States.	Grand total of food and miscellaneous products.		Miscellaneous products for fertilizers and other purposes.			
	Fishery products taken.	Value of same to fishermen.	Fish for fertilizers.	Value of oil, scrap, and compost.	Value of other products.	Total value of miscellaneous products.
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*	*Dollars.*	*Dollars.*
Total	413,525,862	8,874,890	319,005,700	1,262,210	56,520	1,318,730
New York	333,523,173	4,380,565	288,801,200	1,114,158	35,300	1,149,458
New Jersey	65,151,486	3,176,589	29,614,000	147,111	19,920	167,031
Pennsylvania	2,933,000	320,050	....	....	....	....
Delaware	11,918,203	997,695	499,900	941	1,300	2,241

No. 66.—The FISHERIES of the UNITED STATES in 1879—THE MIDDLE ATLANTIC STATES—Continued.

Summary, by States, of the total quantity of fishery products, &c.—Continued.

States.	Food products.						
	Fish sold fresh.		Fish salted.			Products other than fish.	
	Quantity.	Value to fishermen.	Fresh used.	Salted.	Value to fishermen.	Used.	Value to fishermen.
	Pounds.	*Dollars.*	*Pounds.*	*Barrels.*	*Dollars.*	*Pounds.*	*Dollars.*
Total	55, 277, 776	1, 960, 044	2, 484, 000	8, 287	43, 165	36, 758, 386	5, 552, 960
New York	29, 273, 900	1, 045, 748	90, 000	300	1, 800	15, 268, 073	2, 183, 559
New Jersey	15, 318, 226	514, 125	935, 000	3, 117	16, 035	19, 253, 660	2, 479, 398
Pennsylvania	2, 923, 000	132, 200	10, 000	40	850	....	187, 500
Delaware	7, 732, 650	267, 971	1, 449, 000	4, 830	24, 960	2, 236, 653	702, 503

Summary of the quantity of each of the more important food-fishes and other aquatic species taken in each State, and the total production of the fisheries of the Middle Atlantic States.

Species.	Totals by species.	New York.	New Jersey.	Pennsylvania.	Delaware.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Totals by States	413, 525, 862	333, 523, 173	65, 151, 486	2, 933, 000	11, 918, 203
Alewives	4, 146, 700	250, 000	1, 500, 000	....	2, 396, 700
Black drum	212, 500	50, 000	25, 000	....	137, 500
Bluefish	6, 710, 800	3, 000, 000	3, 635, 000	30, 000	45, 800
Bonito	580, 000	500, 000	80, 000	....	....
Butterfish	700, 000	500, 000	200, 000	....	....
Catfish	498, 200	50, 000	135, 000	117, 000	196, 200
Cod	5, 247, 000	3, 580, 000	1, 667, 000	....	....
Clams (soft)	4, 068, 030	3, 407, 750	660, 280	....	....
Clams (quahaugs)	5, 983, 664	2, 795, 840	3, 182, 280	....	5, 544
Crabs	3, 179, 834	1, 624, 583	1, 470, 300	....	84, 951
Croakers	80, 000	35, 000	20, 000	....	25, 000
Eels	2, 036, 300	1, 361, 300	551, 000	....	124, 000
Flounders	1, 091, 500	1, 000, 000	75, 000	....	16, 500
Halibut	100, 000	100, 000	....	....	....
Lobsters	291, 950	135, 000	156, 800	....	150
Mackerel	750, 000	750, 000	....	....	....
Menhaden	318, 588, 700	[a]288, 931, 200	[b]29, 134, 600	....	[c]522, 900
Mixed fresh-water fish	3, 888, 050	2, 726, 300	200, 000	428, 000	533, 750
Mixed salt-water fish	2, 419, 126	1, 534, 000	[d]884, 226	....	900
Moonfish or banded porgy	160, 000	110, 000	50, 000	....	....
Mullet	60, 700	1, 000	5, 000	....	54, 700
Oysters	23, 228, 100	7, 303, 100	13, 825, 000	....	2, 100, 000
Perch	1, 711, 500	545, 000	630, 000	60, 000	476, 500
Scup	1, 550, 000	1, 500, 000	50, 000	....	....
Sea bass	1, 461, 200	750, 000	160, 000	550, 000	1, 200
Shad	5, 207, 200	2, 733, 600	864, 000	559, 600	1, 050, 000
Sheepshead	685, 900	400, 000	275, 000	5, 000	5, 900
Smelt	205, 000	200, 000	5, 000	....	....
Spanish mackerel	225, 000	25, 000	200, 000	....	....
Spot, or Lafayette fish	1, 079, 100	200, 000	230, 000	....	649, 100
Squeteague	11, 063, 500	4, 000, 000	4, 430, 000	15, 000	2, 618, 500
Striped bass	1, 528, 300	795, 000	442, 000	43, 400	247, 900
Sturgeon	1, 164, 000	144, 000	300, 000	150, 000	570, 000
Tautog	635, 000	500, 000	130, 000	....	5, 000
Terrapin	41, 508	1, 800	9, 000	....	30, 708
Tom-cod	205, 000	200, 000	5, 000	....	....
Trout (Mackinaw)	569, 700	569, 700	....	....	....
Turtle (various salt and fresh water species)	15, 300	....	....	....	15, 300
Whitefish	2, 149, 000	1, 174, 000	....	975, 000	....
Whiting or king-fish	58, 500	40, 000	15, 000	....	3, 500

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[a] Including 40,000 pounds salted for food.
[b] Including 70,000 pounds salted for food.
[c] Including 23,000 pounds for food.
[d] Including 550,000 pounds of refuse fish for fertilizers.

No. 66.—The FISHERIES of the UNITED STATES in 1879—Continued.

III.—THE SOUTHERN ATLANTIC STATES.

THE SEA FISHERIES.

Quantities of sea products taken, exclusive of oysters, and the value of same to the fishermen.

States.	Grand total.		Fish for food.				
			Sold fresh.		Salted.		
	Sea products taken.	Value of same to fishermen.	Quantity.	Value to fishermen.	Fresh used.	Salted.	Value to fishermen.
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*	*Pounds.*	*Barrels.*	*Dollars.*
Total	121,230,972	1,155,858	16,849,385	530,410	4,224,500	27,460	86,500
Maryland	6,081,667	88,451	775,000	23,250	20,000	80	500
Virginia	98,261,305	633,240	7,228,885	257,718	150,000	500	2,500
North Carolina	10,167,300	220,745	3,615,000	100,100	4,009,500	26,730	82,600
South Carolina	4,749,400	153,125	3,869,000	108,500	15,000	50	300
Georgia	492,000	19,225	360,000	11,500	....	....	....
Eastern Florida	1,479,300	41,072	1,001,500	29,342	30,000	100	600

States.	Refuse fish and fish for fertilizers.				Terrapin.		
	Fish taken.	Oil produced.	Crude dried scrap.	Value of product as sold.	Number.	Estimated weight.	Value to fishermen.
	Pounds.	*Gallons.*	*Tons.*	*Dollars.*		*Pounds.*	*Dollars.*
Total	94,668,800	214,335	10,573	319,780	121,600	364,800	37,290
Maryland	[a]4,050,000	10,575	300	11,851	10,000	30,000	4,000
Virginia	[b]88,213,800	203,760	10,273	303,829	55,200	165,600	18,550
North Carolina	[c]2,000,000	....	....	2,000	41,000	123,000	10,850
South Carolina	[c]100,000	....	....	700	7,800	23,400	1,050
Georgia	[c]25,000	....	....	300	6,600	19,800	1,650
Eastern Florida	280,000	....	....	1,100	1,000	3,000	200

States.	Green turtle.			Loggerheads and hawkbills.		
	Number.	Estimated weight.	Value to fishermen.	Number.	Estimated weight.	Value to fishermen.
		Pounds.	*Dollars.*		*Pounds.*	*Dollars.*
Total	2,300	96,250	6,075	500	50,000	250
Maryland	....	....	....	....	....	....
Virginia	....	....	....	....	....	....
North Carolina	300	6,000	50	300	30,000	150
South Carolina	100	2,000	25	200	20,000	100
Georgia	....	....	....	....	....	....
Eastern Florida	1,900	88,250	6,000	....	....	....

[a] 1,300,000 pounds composted and 147,000 pounds thrown away.
[b] 7,080,000 pounds composted.
[c] Most of these are thrown away.

No. 66.—The FISHERIES of the UNITED STATES in 1879—THE SOUTHERN ATLANTIC STATES—Continued.

Quantities of sea products taken, exclusive of oysters, &c.—Continued.

States.	Crabs.		
	Number.	Estimated weight.	Value to fishermen.
		Pounds.	*Dollars.*
Total	10, 098, 800	3, 366, 267	80, 263
Maryland	3, 500, 000	1, 166, 667	46, 850
Virginia	6, 417, 600	2, 139, 200	32, 088
North Carolina	33, 600	11, 200	450
South Carolina	126, 000	42, 000	750
Georgia	21, 600	7, 200	125
Eastern Florida	....	....	....

States.	Shrimp.			Clams (quahaugs).			Miscellaneous primary and secondary products.
	Quantity.	Estimated weight.	Value to fishermen.	Quantity.	Estimated weight.	Value to fishermen.	Value to fishermen.
	Bushels.	*Pounds.*	*Dollars.*	*Bushels.*	*Pounds.*	*Dollars.*	*Dollars.*
Total	23, 450	820, 750	49, 500	98, 777	790, 220	41, 410	a4, 470
Maryland	....	....	....	5, 000	40, 000	2, 000	....
Virginia	....	....	....	45, 477	363, 820	18, 555	....
North Carolina	1, 800	63, 000	4, 500	38, 700	309, 600	15, 575	a4, 470
South Carolina	18, 000	630, 000	37, 500	6, 000	48, 000	3, 300	....
Georgia	1, 000	56, 000	4, 000	3, 000	24, 000	1, 650	....
Eastern Florida	2, 050	71, 750	3, 500	600	4, 800	330	....

a $408 of this for whale oil and "bone."

RIVER FISHERIES.

Quantities of river products taken, and the value of same to the fishermen, by States.

States.	Grand total.		Alewives.	
	Quantity.	Value to fishermen.	Quantity.	Value to fishermen.
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*
Total	52, 076, 955	1, 378, 027	32, 109, 372	371, 701
Maryland	15, 430, 903	402, 788	a9, 128, 950	139, 067
Virginia	12, 752, 064	272, 828	b6, 925, 413	76, 300
North Carolina	20, 892, 188	504, 950	c15, 520, 000	142, 784
South Carolina	1, 043, 850	39, 357	400, 000	9, 000
Georgia	1, 290, 500	65, 768	125, 000	3, 750
Eastern Florida	667, 450	32, 336	10, 000	200

States.	Shad.		Sturgeon.		Mixed fish.	
	Quantity.	Value to fishermen.	Quantity.	Value to fishermen.	Quantity.	Value to fishermen.
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*	*Pounds.*	*Dollars.*
Total	10, 863, 942	654, 900	1, 610, 708	67, 112	7, 492, 933	284, 814
Maryland	3, 759, 426	140, 826	144, 000	1, 440	2, 398, 518	121, 85[illegible]
Virginia	3, 171, 953	134, 496	411, 558	6, 978	2, 243, 140	55, 059
North Carolina	3, 221, 263	329, 569	436, 900	18, 094	1, 714, 025	74, 503
South Carolina	207, 000	12, 432	d261, 250	15, 675	175, 000	2, 250
Georgia	252, 000	17, 941	e354, 000	24, 780	559, 500	19, 290
Eastern Florida	251, 700	20, 136	3, 000	150	402, 750	11, 850

a Including 6,846,600 pounds (22,822 barrels) salted, worth $104,750.
b Including 5,540,400 pounds (18,468 barrels) salted, worth $61,040.
c Including 13,968,000 pounds (46,560 barrels) salted, worth $128,506.
d Including 38,250 pounds of caviare, worth $2,358.
e Including 42,000 pounds of caviare, worth $2,910.

No. 66.—The FISHERIES of the UNITED STATES in 1879—THE SOUTHERN ATLANTIC STATES—Continued.

THE OYSTER INDUSTRY.

Quantities, by States, of native oysters produced and the value of the same to the producer; also the quantity rehandled and the enhancement in value in preparation for the market.

States.	Native oysters produced.	Value to fishermen.	Enhancement in value of other oysters in preparation for market. (*a*)		Total value of oysters as sold.
			Rehandled.	Enhancement	
	Bushels.	*Dollars.*	*Bushels.*	*Dollars.*	*Dollars.*
Total	*b*17, 747, 320	4, 718, 636	9, 275, 622	2, 350, 216	7, 068, 852
Maryland	*c*10, 600, 000	2, 650, 000	7, 653, 492	2, 080, 476	4, 730, 476
Virginia	*c*6, 837, 320	1, 948, 636	1, 622, 130	269, 740	2, 218, 376
North Carolina	170, 000	60, 000	....	....	60, 000
South Carolina	50, 000	20, 000	....	....	20, 000
Georgia	70, 000	35, 000	....	....	35, 000
Eastern Florida	20, 000	5, 000	....	....	5, 000

a This includes the transportation of oysters from distant waters or to other markets in oyster vessels; also the increase in value due to planting, fattening, and canning.

b Each bushel of oysters is estimated to yield seven pounds of meats.

c Many of the oysters landed by the Maryland fleet are taken in Virginia waters; the total for Maryland is therefore much larger than the actual production of Maryland waters, while that for Virginia is correspondingly low.

Summary, by States, of the total quantity of fish and other aquatic species taken, and the value of same to the producers.

States.	Grand total of food and miscellaneous products.		Miscellaneous products, for fertilizers and other purposes.			
	Fishery products taken.	Value of same to fishermen.	Fish for fertilizers.	Value of oil, scrap, and compost.	Value of other products.	Total value of miscellaneous products.
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*	*Dollars.*	*Dollars.*
Total	297, 539, 167	9, 602, 737	94, 668, 800	319, 780	4, 470	324, 250
Maryland	95, 712, 570	5, 221, 715	4, 050, 000	11, 851	....	11, 851
Virginia	158, 874, 009	3, 124, 444	88, 213, 800	303, 829	....	303, 829
North Carolina	32, 249, 488	845, 695	2, 000, 000	2, 000	4, 470	6, 470
South Carolina	6, 143, 250	212, 482	100, 000	700	....	700
Georgia	2, 272, 500	119, 993	25, 000	300	....	300
Eastern Florida	2, 286, 750	78, 408	280, 000	1, 100	....	1, 100

States.	Food products.						
	Fish sold fresh.		Fish salted.			Products other than fish.	
	Quantity.	Value to fishermen.	Fresh used.	Salted.	Value to fishermen.	Quantity.	Value to fishermen.
	Pounds.	*Dollars.*	*Pounds.*	*Barrels.*	*Dollars.*	*Pounds.*	*Dollars.*
Total	42, 571, 340	1, 614, 141	30, 570, 500	115, 310	380, 796	120, 719, 527	7, 283, 550
Maryland	9, 359, 303	321, 288	6, 860, 600	22, 903	105, 250	75, 436, 667	4, 783, 326
Virginia	14, 440, 549	469, 506	5, 690, 400	18, 968	63, 540	50, 520, 860	2, 287, 569
North Carolina	10, 539, 188	536, 544	17, 977, 500	73, 290	211, 106	1, 732, 800	91, 575
South Carolina	*a*4, 912, 850	147, 857	15, 000	50	300	1, 115, 400	63, 625
Georgia	*b*1, 650, 500	77, 268	....	....	....	597, 000	42, 425
Eastern Florida	1, 668, 950	61, 678	30, 000	100	600	307, 800	15, 030

a Including 38,250 pounds of caviare, worth $2,358.

b Including 42,000 pounds of caviare, worth $2,940.

No. 66.—The FISHERIES of the UNITED STATES in 1879—THE SOUTHERN ATLANTIC STATES—Continued.

Summary of the quantities of each of the more important food-fishes and other aquatic species taken in each State, and the total yield of the fisheries of the Southern Atlantic States.

Species.	Totals by species.	Maryland.	Virginia.	North Carolina.	South Carolina.	Georgia.	Eastern Florida.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Totals by States..	297,539,167	95,712,570	158,874,609	32,249,488	6,143,250	2,272,500	2,286,750
Alewives	32,184,372	9,203,959	6,925,413	15,520,000	400,000	125,000	10,000
Black bass...........	375,000	....	130,000	175,000	10,000	15,000	45,000
Black drum...........	641,000	75,000	60,000	150,000	300,000	20,000	36,000
Bluefish	2,386,417	10,000	1,546,417	600,000	200,000	5,000	25,000
Catfish	1,443,000	420,000	500,000	300,000	25,000	180,000	18,000
Charleston porgies...	375,000	....	....	50,000	325,000	....	....
Clams (quahaugs or Little Necks)	*a*790,220	40,000	363,820	309,600	48,000	24,000	4,800
Crabs	*b*3,366,267	1,166,667	2,130,200	11,200	42,000	7,200	....
Cravallé	12,000	....	....	....	10,000	....	2,000
Croakers.............	1,056,000	20,000	450,000	350,000	210,000	6,000	20,000
Eels	211,000	15,000	125,000	50,000	11,000	4,000	6,000
Flounders............	141,000	5,000	40,000	20,000	60,000	10,000	6,000
Green turtle	96,250	....	....	6,000	*c*2,000	....	*d*88,250
Groupers.............	3,000	....	....	....	2,000	1,000	....
Grunts and pigfish...	543,000	3.000	100,000	400,000	35,000	....	5,000
Menhaden	92,194,800	3,903,000	88,213,800	50,000	15,000	5,000	8,000
Mixed fresh-water fish	1,457,933	778,518	243,140	39,025	14,000	125,500	257,750
Mixed salt-water fish.	3,350,139	163,000	195,139	2,061,500	587,500	63,000	280,000
Moonfish or banded porgy	221,000	5,000	180,000	30,000	5,000	....	1,000
Mullet	4,424,000	30,000	25,000	3,368,000	232,000	106,000	663,000
Oysters	124,231,240	74,200,000	47,861,240	1,190,000	350,000	490,000	140,000
Pompano..............	36,500	....	8,000	25,000	3,500	....	....
Perch	2,345,000	890,000	745,000	430,000	100,000	115,000	65,000
Red drum	324,000	10,000	40,000	175,000	35,000	10,000	54,000
Sailor's choice......	140,000	2,000	10,000	70,000	40,000	3,000	15,000
Scup	70,000	....	....	20,000	50,000	....	....
Sea bass.............	552,000	5,000	20,000	125,000	375,000	2,000	25,000
Shad	10,878,342	3,774,426	3,171,953	3,221,263	207,000	252,000	251,700
Sheepshead	660,666	12,000	503,666	80,000	28,000	12,000	25,000
Shrimp...............	*e*820,750	....	....	63,000	630,000	56,000	71,750
Spanish mackerel	1,630,163	18,000	1,600,663	10,000	1,000	....	500
Spot.................	1,420,000	20,000	700,000	520,000	160,000	5,000	15,000
Spotted sea trout ...	1,694,000	5,000	369,000	950,000	180,000	90,000	100,000
Squeteague	1,674,000	60,000	1,107,000	170,000	290,000	32,000	15,000
Star-fish and butter-fish	316,000	1,000	115,000	200,000	....	....	....
Striped bass.........	2,252,000	700,000	625,000	770,000	20,000	120,000	17,000
Sturgeon.............	1,610,708	144,000	411,558	436,900	*f*261,250	*g*354,000	3,000
Terrapin	*h*364,800	30,000	165,600	123,000	23,400	19,800	3,000
Turtle (various salt and fresh-water species)	50,000	....	....	30,000	*i*20,000	....	....
Whiting and kingfish.	1,188,000	3,000	175,000	150,000	835,000	15,000	10,000

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a 10 pounds of meats to a bushel of clams.
b 3 crabs to the pound.
c 100 in number.
d 1,900 in number.
e Figured at 35 pounds to the bushel.
f Including 38,250 pounds of caviare, worth $2,358.
g Including 42,000 pounds of caviare, worth $3,940.
h 3½ pounds each.
i 200 in number.

No. 66.—The FISHERIES of the UNITED STATES in 1879—Continued.

IV.—THE PACIFIC STATES AND TERRITORIES.

SALMON FISHERIES AND CANNERIES.

Kinds of products.	Quantity.	Value.
Amount of catch:		*Dollars.*
Number of fish .... number..	2, 755, 000	....
Weight .... pounds..	51, 862, 000	....
Salted, amount fresh .... do....	*a*1, 585, 500	22, 600
Smoked, amount fresh .... do....	200, 000	5, 000
Sold to San Francisco, amount fresh .... do....	2, 000, 000	60, 000
Sold to canneries, amount fresh .... do....	43, 379, 542	900, 818
Consumed locally, amount fresh .... do....	4, 696, 958	46, 000
		1, 944, 387
Product of the canneries .... pounds..	31, 453, 152	3, 255, 365

a Salted, 1,246,000.

PRODUCTS OF THE SEA BORDERING PACIFIC STATES AND TERRITORIES.

Kinds of products.	Quantity.	Value.
		Dollars.
Shore and halibut .... pounds..	14, 483, 000	474, 886
Cod .... do....	4, 721, 920	196, 870
Salmon .... do....	53, 844, 000	2, 977, 564
General (Alaska)	105, 000, 000	525, 000
Total, fresh fish (dried and smoked reduced to pounds fresh) . pounds..	178, 048, 920	4, 174, 310
Crabs, shrimps, &c .... do....	2, 500, 000	66, 358
Oysters, mussels, abalones, &c .... bushels..	125, 000	703, 250
Whale oil .... gallons..	158, 685	80, 150
Fish oil (seal, &c.) .... do....	168, 600	23, 300
Whalebone .... pounds..	61, 000	122, 000
Seal flesh .... do....	1, 000, 000	10, 000
Seal-skins .... number..	155, 718	1, 540, 912
Sea-otter skins .... do....	3, 575	178, 750
Eggs of sea birds .... do....	120, 000	1, 500
Seaweed .... pounds..	250, 000	200
Salt .... do....	60, 400, 000	302, 000
Total	....	7, 202, 730

V.—THE GREAT LAKES.

Quantities and values of fish taken in the Great Lakes.a

Lakes.	Total.		Whitefish.		Trout.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*	*Pounds.*	*Dollars.*
Total	68, 742, 000	1, 052, 900	21, 463, 900	778, 100	6, 804, 600	221, 700
Superior	3, 816, 625	118, 370	2, 257, 000	74, 100	1, 404, 750	41, 950
Michigan *b*	23, 141, 875	668, 400	12, 030, 400	440, 170	2, 659, 450	82, 650
Huron and Saint Clair *c*	11, 536, 200	293, 550	3, 926, 700	132, 700	2, 084, 500	73, 500
Erie	26, 607, 300	412, 880	2, 185, 800	77, 930	26, 200	800
Ontario	3, 640, 000	159, 700	1, 064, 000	53, 200	569, 700	22, 800

a The values are estimated on the basis of the prices of fresh fish.

b Includes the fisheries of Mackinack.

c Includes the fisheries of Detroit and Saint Clair Rivers, and of the small portion of Michigan bordering on Lake Erie.

No. 66.—The FISHERIES of the UNITED STATES in 1879—THE GREAT LAKES—Continued.

Quantities and values of fish taken in the Great Lakes—Continued.

Lakes.	Herring.		Sturgeon.		Hard fish.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*	*Pounds.*	*Dollars.*
Total	15, 356, 300	117, 100	7, 012, 100	116, 300	6, 722, 600	182, 900
Superior	34, 000	700	....	....	26, 875	800
Michigan *a*	3, 050, 400	46, 950	3, 839, 600	63, 825	110, 925	2, 969
Huron and Saint Clair *b*	897, 500	6, 300	1, 582, 500	23, 850	2, 370, 000	52, 300
Erie	11, 874, 400	63, 150	1, 590, 000	28, 625	4, 214, 800	126, 850
Ontario	....	....	....	....	....	....

Lakes.	Soft fish.		Rough fish.		Coarse fish.		Mixed fish.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*	*Pounds.*	*Dollars.*	*Pounds.*	*Dollars.*
Total	7, 086, 700	90, 600	43, 000	875	2, 302, 400	89, 025	1, 950, 400	56, 800
Superior	8, 000	120	....	....	....	....	26, 000	700
Michigan *a*	408, 800	3, 780	....	....	508, 600	12, 725	533, 700	15, 350
Huron and Saint Clair *b*	675, 000	4, 900	....	....	....	....	....	....
Erie	5, 994, 900	81, 800	43, 000	875	....	....	1, 178, 200	32, 850
Ontario	....	....	....	....	1, 793, 800	76, 300	212, 500	7, 400

NOTE.—Under "hard fish" are included wall-eyed pike, black bass, lake pike, muskallonge, and skinned catfish, with such amounts of whitefish and trout as could not be separated from the general sum. Under "soft fish" are placed saugers, white bass, suckers, and lake shad. The "rough fish" of Lake Erie are principally catfish, but at Toledo all kinds of fish undressed are termed "rough." The "rough fish" of Green Bay, Lake Michigan, includes the same kinds as the "coarse fish" of Lake Ontario, namely, all species except whitefish and trout. Under "mixed fish" are placed various amounts of all kinds of fish.

Total quantities and values of fresh and prepared fish, caviare, isinglass, and oil; and the aggregate value of the same.

Lakes.	Total.	Fresh fish.	
	Value.	Quantity.	Value.
	Dollars.	*Pounds.*	*Dollars.*
Total	1, 784, 050	43, 122, 270	1, 102, 950
Superior	105, 535	1, 494, 500	47, 780
Michigan *a*	612, 416	10, 728, 250	348, 070
Huron and Saint Clair *b*	349, 365	10, 354, 850	267, 300
Erie	578, 690	17, 054, 670	312, 250
Ontario	138, 050	3, 490, 000	182, 550

Lakes.	Salt fish.		Frozen fish.	
	Quantity.	Value.	Quantity.	Value.
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*
Total	16, 793, 540	402, 670	2, 821, 650	126, 100
Superior	1, 549, 500	57, 755	....	....
Michigan *a*	7, 730, 740	208, 425	100, 000	6, 000
Huron and Saint Clair *b*	800, 800	16, 000	1, 165, 000	63, 360
Erie	6, 712, 500	125, 490	1, 406, 650	51, 240
Ontario	....	....	150, 000	5, 500

a Includes the fisheries of Mackinac.

b Includes the fisheries of Detroit and Saint Clair Rivers, and of the small portion of Michigan bordering on Lake Erie.

No. 66.—The FISHERIES of the UNITED STATES in 1879—THE GREAT LAKES—Continued.

Total quantities and values of fresh and prepared fish, &c.—Continued.

Lakes.	Smoked fish.		Caviare.	
	Quantity.	Value.	Quantity.	Value.
	Pounds.	*Dollars.*	*Pounds.*	*Dollars.*
Total	1,721,770	109,970	230,160	34,815
Superior	....	....	....	....
Michigan *a*	788,590	52,930	31,330	6,620
Huron and Saint Clair *b*	....	....	20,250	2,025
Erie	933,180	57,040	178,580	25,670
Ontario	....	....	....	....

Lakes.	Isinglass.		Oil.	
	Quantity.	Value.	Quantity.	Value.
	Pounds.	*Dollars.*	*Gallons.*	*Dollars.*
Total	3,909	5,765	5,680	2,280
Superior	....	....	....	....
Michigan *a*	265	265	200	100
Huron and Saint Clair *b*	300	500	600	180
Erie	3,344	5,000	4,880	2,000
Ontario	....	....	....	....

a Includes the fisheries of Mackinac.

b Includes the fisheries of Detroit and Saint Clair Rivers, and of the small portion of Michigan bordering on Lake Erie.

NOTE.—The difference in the values of fish in the above tables is due to the fact that in the former the value is estimated on the basis of *fresh fish*, the latter on the basis of their value in the condition in which they are at last put into the market.

No. 67.—THE FISHING INDUSTRY.

The following data of the *Fishing Industry* are from the valuable report for 1886 of Mr. W. A. Wilcox, manager of the American Fish Bureau, Gloucester, Mass., who has a wide reputation as an authority in matters relating to this subject:

From the most reliable, available statictics, we find the fishing industry of North America and Europe gives employment to between 600,000 and 700,000 men and near 150,000 vessels, the total annual products being about 1,500,000 tons, or 3,000,000,000 pounds of fish, equal to 150,000 car-loads, which would load a railroad train 910 miles long.

A few of the leading nations that help make up these figures are as follows: The United States, with 101,684 fishermen and 6,605 vessels, not counting the small boats and unenrolled vessels of under 5 tons; Great Britain was reported to have 120,000 fishermen on January 1, 1887, with the following vessels:

	Ports.	Vessels.
England	57	4,352
Isle of Man	3	305
Scotland	21	4,459
Ireland	17	521
Total	98	9,637

France employs 126,000 persons in the sea fisheries proper and coast fisheries, the annual proceeds being valued at $16,660,000; Norway produces for export $11,900,000, and for home consumption $3,500,000 to $4,500,000 worth of fish; Italy produces $9,520,000; Russia, $16,600,000 annually; and Germany is reported as receiving annually $18,326,000 worth of fish, two-thirds of which are herring.

Statement of the total quantity and value of the fish landed on the English and Welsh coasts during the twelve months ending December 31, 1886.

Kinds of fish.		Quantity.	Value.
Turbot	cwts	59,542	£182,079
Soles	do	97,171	425,737
Prime fish not separately distinguished *	do	370,014	369,089
Total prime fish	do	526,733	976,905
Salmon	do	15,066	95,493
Cod	do	247,646	192,505
Ling	do	57,698	38,401
Haddock	do	1,241,825	441,818
Mackerel	do	264,946	177,525
Herrings	do	1,955,374	465,250
Pilchards	do	358,334	42,487
Sprats	do	148,818	13,850
All other, except shell-fish	do	1,580,842	1,238,870
Total	do	6,391,782	3,683,104
Shell-fish:			
Lobsters	number	451,904	19,007
Crabs	do	2,863,102	39,359
Oysters	do	45,554,000	135,042
Other shell-fish	cwts	285,839	72,481
Total		....	265,889
Total value of fish landed		....	3,948,993

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* In Great Britain sea fish are designated as "prime" and "offal." Under the former classification are included all the higher grades of fish, such as soles, turbot, &c., while the cheaper grades are classed as offal although extensively and universally sold for food.

THE NEW ENGLAND FISHERIES.

The history of the New England fisheries is one of peculiar interest. In its earliest days almost the sole industry of the colonies, the salary of the minister, the debt due the merchant—in fact most of the obligations being settled for in the staple commodity, fish.

Before the boy had reached his teens he was found on the deck of the fishing vessel serving his apprenticeship, and early learning to face and fear no danger. From such a school and training the early privateer and, later, the Navy have in times of pressing need found the material that always led to success. As the years pass swiftly by the numerous new and larger industries for a time attract more attention, yet the oldest industry in the country loses none of its interest; each day in the year finds something new from the ever, yet never, changing sea. As the record for the year is closed, a review always presents much of interest and variety from those of former ones. During the past eighteen months, since the expiration of the Washington Treaty with Great Britain, the fishing industry has attracted much attention. Much has been written, printed, and spoken, yet, unfortunately, it does not seem to be understood.

Probably few of the consumers, as well as many that from the agitation of the fisheries take an interest in them, could locate or have much of an idea where the bulk of the salt-water fish that supplies the nations are caught. They little think of the fisherman as sailing from home for weeks or months ere his return; as being from 150 to as far as 2,400 miles from home before he enters his little dory, and there, often 100 miles or more from the nearest land, beginning to take his cargo. Yet such is the fact. Often for days and weeks surrounded by a dense fog, frequently failing to find his vessel and drifting and suffering alone in the wide ocean subject to fearful storms and wrecks, "Last seen on Georges," or other distant fishing banks, being the only report, until the sad words must be spoken, "Given up," and the losses of the year have another addition to the long number gone before.

In the early history of the fishing industry of New England we find the business was carried on in small vessels or boats, that from the abundance of fish had no occasion to go far from shore. In those days the near-shore fishing grounds along the New England coast were well supplied with all the leading and desirable varieties of salt-water fish, and were of great value to the fishermen. The same, probably, might be said of the near-shore fishing grounds of the British provinces at that date.

As far back as 1818, the year of the treaty of London, which now comes to the front, very little attention was paid to the mackerel fishery, only 30,969 barrels being packed that year in Massachusetts; and for ten years—1809-1818, inclusive—the total pack was only 180,492 barrels.

With the exception of a few vessels that annually visited the Grand Banks or fished off the Labrador coast, neither the New England nor provincial fishermen had occasion to go far from their own shore, with no steamers or railroads for transshipment, no telegraph to call and receive or send reports and orders. Under such circumstances was the treaty of 1818 ratified.

In 1819 the mackerel fishery first makes much of a showing, the pack of Massachusetts being 100,111 barrels. Fluctuating, yet growing in importance up to 1831, in which year Massachusetts packed out 383,548 barrels, an amount that has never since been reached by this State in any one year.

As is well known, the mackerel is a migratory fish; while in one or a series of years it is found in immense quantities in one part of the North Atlantic Ocean and its bays, from some as yet unknown cause in another year or series of years it will be found hundreds of miles away. No part of the North American continent can justly lay claim to this fishery.

In those early days, and up to about 1870, the mackerel catch was made with the hook and line, as they could be used near shore. Often a considerable part of the catch was made there. Since the introduction into general use of the purse seine, in 1870, we find nearly all of the mackerel catch has been made on the fishing ground of no nation, but on the high seas, or more than three miles from shore. Of late years, mackerel, in common with other varieties of fish that once were found plenty near shore, are now seldom found in abundance within three miles of land, and oftener wide out, or on the more distant fishing banks.

Scientific research has added much to the knowledge of the fisheries, yet where the mackerel come from in spring, where they go late in the fall and spend the winter, why they are found in great abundance off the New England coast for a series of years, and perhaps the next year in the Gulf of St. Lawrence, remains as much a mystery and matter of theory as one hundred years ago. The honest fact remains that while the near shore fisheries of New England and the British provinces are to a small extent valuable to the fishermen adjacent to them, they are not to others, the amount of fish there caught, compared with the aggregate catch, being insignificant, the bulk of the catch being taken on the distant fishing banks of the high seas, as shown by the accompanying diagram and description of the fishing grounds.

It is desirable that this question be fully understood. That the day may not be far distant when the fisherman with all his hardships, exposures, and dangers, may not be further harassed, and constantly have the danger of heavy fine or total loss of his property, for having crossed an imaginary and difficult-to-locate three-mile line, or availed himself of the common commercial right of all civilized nations—that every fisherman of whatever nation may take his fish wherever found with as much freedom as the fish now have to swim across the boundary line. This is no theory of the day, as we find as far back as the days of Queen Elizabeth, who is reported as having said to the King of Denmark, "The sea is free to all men. My fishermen have the right to fish in the sea wherever their vessels will float." Certainly the insignificant amount caught near the shores of the North American continent is not worthy of the continual differences of two great nations. It is also hoped the day may soon arrive when the fishing industry may not be singled out from that of all others in any privations of commercial rights. Conforming cheerfully to all just laws, the fishermen may reasonably claim equality, justice, and such protection as the importance of their extra hazardous business calls for.

THE FISHING GROUNDS.

The fishing grounds of the Western Atlantic (see accompanying diagram) are the largest and most valuable in the world. They quickly attracted the attention of the early explorers who visited America, and who reported to their countrymen the extraordinary wealth of the western seas. At a period when nearly all Europe professed the Roman Catholic faith and fish was consumed in enormous quantities in the many church fasts, the discovery of such vast fishing grounds, teeming with their millions of undisturbed wealth, created the most profound sensation, and kings, noblemen, and wealthy merchants engaged in and fostered the enterprise of fishing with a zeal that we may now find difficult to realize or appreciate, and which has perhaps never since been equaled except in instances of mining excitement.

It is a well-established historical fact that the colonization of North America was largely due to the interest felt in the possession of the fishing grounds, and for their possession or retention fierce wars were waged between the French and English for upwards of two centuries; and Sabine* holds the opinion that the disputes and contentions which originated in the struggle for obtaining exclusive rights on the fishing banks by the English Colonists led ultimately to the Revolutionary War and the birth of a new nation.

The Biscayan fishermen have a tradition that Newfoundland was visited by their countrymen prior to the time of Columbus, but this story is improbable and, as Sabine says, "may be dismissed now as one which rests upon no clear and authentic testimony." The French fishermen were, however, the pioneers in the cod fisheries of the Western Atlantic, and it is fairly certain that as early as 1504 the Normans and Biscayans knew of the Newfoundland fisheries. Within twenty-five years of the discovery of America by Columbus the crews of 50 ships, Basque, Norman, Spanish, and Portuguese were plying their lines on the great banks of Newfoundland, more than three hundred years ago. In 1577 the French had employed not less than 150 vessels in the American fisheries, and we are told that "they prosecuted the business with great vigor and success." From that time to the present the fishing banks of the Western Atlantic have been visited by fleets of varying magnitude, and they have proved an unexampled storehouse of wealth in supplying innumerable millions with food.

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*Lorenzo Sabine, author of a "Report on the principal fisheries of the American Seas"; Washington, 1853.

These banks, of which we have so hastily and imperfectly sketched the early history, constitute a chain of submerged ocean plateaus elevated considerably above the surrounding sea bottom and extending from Cape Cod to and includig the Flemish Cap off the eastern coast of Newfoundland. While there are cod-fishing grounds of some importance nearer the land, both off the coasts of the United States and the British provinces, these ocean banks generally are at considerable distance from the land and therefore free from any national jurisdiction. They are the natural and favorite resort of the cod and halibut, and, as previously stated, constitute the richest and most unfailing resort for fishermen which is known to exist. Elsewhere allusion is made to the extent and importance of the fishing grounds for mackerel and other migratory species; here we have only spoken of the banks proper which may or may not at times be valuable as a resort for mackerel.

LOCATION OF FISHING BANKS.

Georges Bank.—This fishing ground is celebrated for producing the finest codfish and halibut found off the North American continent. It is fished on at all times of the year by a large fleet from New England ports; seldom by vessels from other than United States ports. It extends about 70 miles north and south, and 80 miles east and west, in latitude 41° to 42° 30′, longitude 66° 15′ to 69° west. Lowest depths, 2½ fathoms; usual depths fished on, 25 to 80 fathoms. Halibut fares are taken on the east and northeast edge of the bank, in from 150 to 200 fathoms. Distance from Gloucester, ESE., 120 miles; the nearest land being Highland Light, Cape Cod, 95 miles.

Brown's Bank.—ENE. from Georges, in latitude 42° 45′, longitude 66°. From the shoalest water the nearest land is Cape Sable, 45 miles NE.

La Have Bank.—E. by S. from Brown's, in latitude 43°, longitude 64° 15′ distant from Brown's, 80 miles E. by S.; Shelburne, N. S., 60 miles distant, being the nearest land.

Sable Island Bank, or more generally known as *Western Bank*, in latitude 43° to 44° 15′, longitude 59° 15′ to 62° 30′, about 75 miles north and south, 135 miles east and west. Nearest land from the fishing ground, Canso, N. S., 80 miles.

Banquereau.—Next in the chain of fishing banks, in longitude 57° to 60°, latitude 44° 05′ to 45°, the western edge being just north of the eastern edge of Sable Island bank, both banks running about east and west. Nearest land, Cape Canso, N. S., 80 miles.

Saint Peter's Bank.—Lies in a NW. and SE. direction, in latitude 45° 10′ to 46° 45′, longitude 55° 30′ to 57° 20′. From the shoalest water to St. Pierre, Newfoundland, the nearest land, the distance is 75 miles.

Green's Bank.—Runs north and south, being between Saint Peter's and Grand Banks, is 60 miles long N. and S., and 40 miles wide E. and W., longitude between 54° and 55°, latitude 45° and 46°. Nearest land from shoalest water is Cape St. Mary's, Newfoundland, 70 miles distant.

Grand Bank of Newfoundland.—This celebrated bank, that for over three centuries has seldom failed of furnishing abundance of codfish, is triangular in shape, the longest direction being E. by S. and W. by N., in longitude 48° to 54°, latitude 43° to 47° 30′, being 270 miles wide, NNE. by SSW., and about the same distance in E. by S. and N. by W. direction. The shoalest water, 3 fathoms, is found on Virgin Rocks, Cape Race, Newfoundland, the nearest land being 90 miles from shoalest water, and Gloucester, Mass., is 885 miles distant.

Flemish Cap.—This ground is, to a small extent, fished on by American vessels; it is located about 300 miles east of the Grand Banks and some 1,200 miles from Gloucester.

Greenland.—Is annually visited by a few vessels from Gloucester on halibut trips; distance from home port 1,600 miles.

Iceland.—The most distant fishing grounds visited by American vessels; 2,400 miles from Gloucester, that port annually sending a small fleet, their catch being confined to halibut, of which a full fare is usually secured. Vessels from France and other European countries fish off this coast, mostly for codfish.

These fishing banks are the principal fishing grounds that supply the United States, and to more or less extent other nations, with salt fish. The outlines given do not always conform exactly with the charts. Of late years the fishermen have gradually extended the grounds fished on into deeper water. This is especially noticeable in the halibut fishery—vessels now fishing in from 200 to 400 fathoms, or 1,200 to 2,400 feet of water, yet locating their catch on a given bank.

According to the United States Fish Commission, the area of the offshore banks, exclusive of the fishing grounds off Greenland and Iceland, is 73,123 geographical square miles, all of which, being on the high seas, are under the control of no nation and free to all.

Capt. J. W. Collins, of the United States Fish Commission, in an article lately published in the Century, gives the area and location of the mackerel fishing ground as follows:

"According to a report on the fishing grounds of North America, prepared by the United States Fish Commission, the total area of the mackerel fishing grounds off the eastern coast of the United States is 56,000 geographical square miles. Here, in our own waters, the most extensive and valuable mackerel fishery of the world is carried on. In addition to this, our fishermen have the right to fish in the waters of the Gulf of St. Lawrence, outside the 3-mile limit; and thus is opened to them an additional area of 15,200 square miles, making a total of more than 70,000 square miles over which they have an unquestioned right to prosecute their operations. Now, if we estimate the area of inshore waters frequented by our fishermen in pursuit of mackerel, we will be able to get an idea of their relative importance, always supposing that the fishery can be prosecuted as well inshore as it can off, which is not the fact, as will be shown hereafter. The north shore of Prince Edward Island and Cape Breton are the localities in the inshore British waters which are now chiefly visited by American vessels in pursuit of mackerel. The total area of the inshore waters in these regions commonly resorted to by American fishermen does not exceed much 775 square miles (if we follow the coast line), or about one per cent. of the area of the mackerel fishing grounds to which they have an unquestioned right. Or, if we include the south shore of Nova Scotia and Cape Breton, the east side of Cape Breton and what is known as the 'West Shore'—from Point Escumenac to Point Miscou—in the Gulf of St. Lawrence, we shall have a total area of 2,064 square miles. But a simple statement of the area of these inshore waters, over which alone England has any control, can convey little idea of their value. The mackerel fishery is now exclusively prosecuted with the great purse-seine instead of by hook and line, which were formerly used. Therefore, the larger portion of this inshore area of water being too shallow and the bottom too rough to permit of the successful manipulation of the fishing apparatus, it is comparatively seldom that any fish are caught near the land. On the southern coast of Nova Scotia few fish are taken by American vessels, and these only during the migratory period. Thus it will be seen that the available area inside the limit is exceedingly small."

"Then, too, the change in the method of fishing has, in recent years, led to the almost practical abandonment of the mackerel fishery in the Gulf of St. Lawrence Occasionally a considerable fleet enters the Gulf; but, since the results have generally been unsatisfactory, there have been seasons when only a very few vessels went there. It is true, perhaps, that, the mackerel being a remarkably erratic species, its movements cannot be predicted from year to year with any absolute certainty."

"The results obtained in the past ten years, since the universal employment of the purse seine, may serve, however, as a fair basis in judging of the future. It is an historical fact, now well established by the most accurate and careful investigation and inquiry, that the catch of mackerel in the Gulf of St. Lawrence, not to speak of the inshore waters under British control, has been of comparative insignificance during the last decade. And even under the most favorable conditions, when the catch there has been exceptionally large, as in 1885, the total product of the Gulf mackerel fishery did not amount to more than 8 per cent. of the entire catch of the New England fleet. Of this, less than one-third was taken inside of the 3-mile limit."

Fishing losses from January 1 *to December* 31, 1886.

Hailing port.	Vessels.	Tonnage.	Value.	Insurance.	Lives lost.
Portland, Me	8	245.87	$18,000	$10,800	....
Gloucester, Mass	17	1,182.75	115,800	93,345	115
Beverly, Mass	2	32.15	2,700	1,800	2
Salem, Mass	1	21.41	2,000	....	....
Swampscott, Mass	1	23.29	1,500	....	....
Boston, Mass	2	154.56	18,500	7,000	....
Noank, Conn	1	26.15	2,500	....	1
Total	27	1,686.18	156,000	112,945	118

Mackerel vessels lost: Gloucester, 8; Portland, 2; Boston, 1. Other vessels lost were engaged in the cod, halibut and herring fisheries. Fifty-one lives lost from Gloucester vessels by being swept overboard or lost in the fog are included in the above. Thirty-eight seine boats and several seines lost by the mackerel fleet. Schooner Highland Light, of Wellfleet, on mackerel voyage, seized and confiscated by the British provincials. Schooner David J. Adams, of Gloucester, on codfish voyage, was the first vessel seized during the season, and yet remains in possession of the provinces; the case yet undecided.

IMPORTANCE OF THE FISHERIES.—Probably no industry, with equal capital, gives employment to and supports so many persons as the fisheries. The last official returns for the United States are as follows: Number of vessels, 6,605; tonnage, 208,297.82; persons employed, 131,426; capital invested, $37,955,349.

The New England States make the following report for the past year: Vessels engaged in all branches of the fisheries, including oyster and whaling, 1,956; tonnage, 115,130; men employed, 17,996.

THE WHALE FISHERY.

[Abstract of the forty-third Annual Review of the Industry.]

New Bedford, January 24, 1887.—The Whalemen's Shipping List will this week publish the 43d annual review of the whale fishery of the United States for the past year. From advance sheets it is learned that the total number of vessels of all classes engaged in the business is 121, of which 19 hail from San Francisco, and all are engaged in right whaling. The decrease of tonnage during the year was 827 tons. The present tonnage of the entire fleet is 28,291, of which 6,500 tons are now in eastern ports, and over one-third of this tonnage is offered for sale. The north Pacific fleet comprised 38 vessels. The total catch yielded about 20,000 barrels of oil and 309,000 pounds of whalebone. The Arctic fleet took 153 whales, as against 222 in 1885. The season was an unprofitable one. Imports for 1886 were: Sperm oil, 23,312 barrels; whale oil, 27,249 barrels; whalebone, 352,590 pounds. Exports were: Sperm oil, 3,118 barrels; whale oil, 18,253 barrels; whalebone, 184,511 pounds. Stock in the United States January 1, 1887: Sperm oil, 18,210 barrels; whale oil, 9,270 barrels; whalebone, 322,900 pounds. The average price of whale oil during the year was 33 cents per gallon; sperm oil, 74½ cents per gallon; whalebone, $2.73 per pound.

PACIFIC FISHERIES.

[From San Francisco Chronicle.]

San Francisco, January 1, 1887.—Forty-four vessels were sent from this port to the Arctic last season to hunt for whales. Of these all but one, the tender Clara Light, returned. The Clara Light was crushed in the ice, and her catch, which was very small, was entirely lost. On their return to this port, and while setting out for the South Seas, the Atlantic and Mary and Helen were lost, the former being wrecked near the Cliff House, and the latter being burned at the oil refinery. The catch of these 43 vessels was 20,307 barrels of oil, 332,931 pounds of bone, and 5,273 pounds of ivory. About one-half of these vessels were owned in San Francisco.

The following statement of catches in the Pacific fisheries for twelve years is given for the purpose of comparison:

Years.	Oil.	Bone.	Ivory.	Years.	Oil.	Bone.	Ivory.
	Barrels.	*Pounds.*	*Pounds.*		*Barrels.*	*Pounds.*	*Pounds.*
1874	10,000	86,000	7,600	1882	21,100	316,600	17,800
1875	16,300	157,000	25,400	1883	12,300	160,200	23,100
1876	2,800	8,800	7,000	1884	20,373	295,700	5,421
1877	13,900	139,600	74,000	1885	24,844	451,068	6,564
1878	9,600	73,300	30,000	1886	20,307	332,931	5,273
1879	17,400	127,500	32,900				
1880	23,200	339,000	15,300	Totals	214,524	2,842,499	265,758
1881	21,300	354,500	15,400				

The returns of oil, bone, and ivory made here for the past year are a little less than for 1885, but they are slightly in excess of the figures for 1884, so that the production would appear to be holding its own at least. Prices have been holding up fairly well, and on the whole there is no need for those engaged in the industry to feel discouraged.

THE CODFISHING FLEET OF THE PACIFIC COAST.

With one vessel less than in 1885, the codfishing fleet caught 155,000 fish less than the total for the previous year. The fleet of 1886 was composed of 11 vessels, one of which made three round trips, and another two.

The catch for the past season was taken from the following sources:

	No. of fish.
Choumagin Islands	566,000
Okhotsh Sea	426,000
Behring Sea	239,000
Total	1,231,000

Since the beginning of the codfishing industry in 1865 the annual catches have been as follows:

Year.	Vessels.	No. of fish.	Year.	Vessels.	No. of fish.
1865	7	469,400	1877	10	750,000
1866	18	724,000	1878	12	1,190,000
1867	19	943,400	1879	13	1,499,000
1868	10	608,000	1880	8	1,206,000
1869	19	1,032,000	1881	7	1,042,000
1870	21	1,265,500	1882	13	1,302,000
1871	11	772,000	1883	16	1,750,000
1872	5	800,000	1884	15	1,619,000
1873	7	550,000	1885	12	1,384,000
1874	6	381,000	1886	11	1,231,000
1875	7	504,000			
1876	10	758,000	Total since 1865		21,480,300

The catch of 1883 remains the highest in the codfishing history of the Pacific coast. During the past year 17,672 barrels and 298,007 boxes of salmon were received from Oregon, against 9,579 barrels and 212,516 boxes in 1885.

The mackerel catch.

States.	Southern.		New England Shore.		Nova Scotia Shore and Gulf of St. Lawrence.		Total 1886.		Total 1885.	
	Cured.	Fresh.	Cured.	Fresh.	Cured.	Fresh.	Cured.	Fresh.	Cured.	Fresh.
Massachusetts:	*Bbls.*	*Bbls.*	*Bbls.*	*Bbls.*	*Bbls.*	*Bbls.*	*Bbls.*	*Bbls.*	*Bbls.*	*Bbls.*
Vessels	2,642	9,928	8,126	10,032	54,633	......	65,401	19,960	198,036	55,183
Weirs and traps	......	......	1,299	5,991	......	......	1,299	5,991	......	......
Maine:										
Vessels	95	2,590	6,604	2,528	10,727	780	17,426	5,898	95,861	24,055
Weirs and traps	......	......	80	950	......	......	80	950	......	......
New Hampshire:										
Vessels	......	......	125	1,500	......	......	125	1,500	619	800
Rhode Island:										
Weirs and traps	......	......	650	1,100	......	......	650	1,100	......	......
Connecticut:										
Vessels	......	......	275	......	......	......	275	......	1,123	......
New York:										
Vessels	......	......	50	......	100	......	150	......	1,257	1,000
Pennsylvania:										
Vessels	......	68	200	......	148	......	348	68	831	250
Total	2,737	12,586	17,409	22,101	65,608	780	85,754	35,467	297,727	80,788

Vessels engaged.

	Vessels.	Tonnage.	Crews.
Massachusetts:			
Vessels	220	16,850.09	3,318
Weirs and traps	......	......	243
Maine:			
Vessels	99	5,944.36	1,377
Weirs and traps	......	......	......
New Hampshire:			
Vessels	4	186.91	60
Rhode Island:			
Weirs and traps	......	......	......
Connecticut:			
Vessels	2	88.13	19
New York:			
Vessels	1	77.00	17
Pennsylvania:			
Vessels	1	79.15	17
Total	327	22,726.24	5,046

The New England fisheries, 1886.—*Catch of cod, mackerel, herring, other food-fish, and menhaden.*

1886.	Catch on Georges and Brown's Banks and New England Shore.			Grand and Western Banks salt cod.	Fresh halibut.	Herring.	Salt mackerel.	Fresh mackerel.
	Salt cod.	Fresh cod.	Other ground fish.					
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Bbls.*	*Bbls.*	*Bbls.*
Maine:								
Cod, vessels	3,795,830	....	6,534,836	10,842,896	339,000	6,000	....	....
Mackerel, vessels	....	....	....	....	....	....	17,426	5,898
Weirs and traps	....	....	....	....	....	45,340	80	950
Small boats	....	568,500	278,800	....	....	....	....	....
New Hampshire:								
Cod, vessels	....	1,593,750	531,250	....	127,000	....	....	....
Mackerel, vessels	....	....	....	....	....	....	125	1,500
Weirs and traps	....	....	....	....	....	750	....	....
Massachusetts:								
Cod, vessels	31,067,534	11,107,173	22,350,127	36,600,180	12,309,744	11,541	....	....
Mackerel, vessels	....	....	....	....	....	....	65,401	19,960
Weirs and traps	....	....	....	....	....	10,064	1,299	5,991
Small boats	....	1,154,000	....	....	....	800	....	....
Rhode Island:								
Cod, vessels	....	1,125,000	200,000	....	....	....	....	....
Weirs and traps	....	....	....	....	....	300	650	1,100
Small boats	....	576,000	....	....	....	....	....	....
Steamers	....	....	....	....	....	....	....	....
Connecticut:								
Cod, vessels	....	3,586,510	....	....	618,950	....	....	....
Weirs and traps	....	....	....	....	....	....	....	....
Small boats	....	15,500	....	....	....	....	....	....
Mackerel, vessels	....	....	....	....	....	....	275	....
Steamers	....	....	....	....	....	....	....	....
Total	34,863,364	19,726,433	29,895,013*a*	47,443,076	13,394,694	74,795	85,256	35,399

1886.	Vessels.	Tonnage.	Crews.
Maine:			
Cod, vessels	264	10,597.84	2,216
Mackerel, vessels	99	5,944.36	1,377
Weirs and traps	....	....	Men, 310
Small boats	....	....	369
New Hampshire:			
Cod, vessels	8	241.31	80
Mackerel, vessels	4	186.91	60
Weirs and traps	....	....	15
Massachusetts:			
Cod, vessels	479	28,583.18	6,366
Mackerel, vessels	220	16,350.69	3,313
Weirs and traps	....	....	Men, 243
Small boats	....	....	581
Rhode Island:			
Cod, vessels	18	369.00	78
Weirs and traps	....	....	Men, 315
Small boats	....	....	90
Steamers	18	843.92	249
Connecticut:			
Cod, vessels	72	1,937.44	326
Weirs and traps	....	....	Men, 30
Small boats	....	....	6
Mackerel, vessels	2	88.13	19
Steamers	31	1,575.44	378
Total	1,200	66,718.22	16,420

a Hake, haddock, cusk, and pollock.

Other fish: 7,135 barrels squid; 915,770 pounds food-fish from traps, nets, and boats; 5,178,535 pounds of fish from traps, used for fertilizing.

The reports from the menhaden steamers are not complete. The 24 reporting landed 470,022 barrels of menhaden.

Official returns by the inspector-general of MACKEREL INSPECTED in MASSACHUSETTS, showing the total number of barrels of each quality of pickled mackerel inspected in Massachusetts each year from 1809 *to* 1886, *and the total value of each year's inspection, each year from* 1830 *to* 1886.

Year.	Barrels mackerel inspected.					Total value.
	1.	2.	3.	4.	Total.	
1809	2,274	3,078	3,472	....	8,825	....
1810	2,540	4,770	5,242	....	12,552	....
1811	1,368	6,028	10,009	....	17,401	....
1812	1,000	2,154	2,726	....	5,881	....
1813	900	1,231	1,625	....	3,756	....
1814	89	546	703	....	1,339	....
1815	3,225	5,456	7,377	....	16,059	....
1816	8,694	9,264	13,010	....	30,969	....
1817	10,406	5,267	21,688	....	37,362	....
1818	14,410	11,162	20,775	....	46,348	....
1819	19,614	36,521	43,975	....	100,111	....
1820	12,455	34,811	68,374	....	115,641	....
1821	7,400	32,103	71,505	....	111,009	....
1822	20,032	66,681	73,578	....	160,294	....
1823	19,804	62,047	63,154	....	145,006	....
1824	45,246	75,221	71,183	....	191,650	....
1825	29,640	109,840	114,904	....	254,384	....
1826	43,499	80,584	34,657	....	158,740	....
1827	81,357	69,335	39,612	....	190,304	....
1828	63,235	110,666	63,422	....	237,324	....
1829	54,184	77,098	94,695	....	225,977	....
1830	47,868	104,569	156,025	....	308,463	$1,119,470
1831	70,198	171,186	142,164	....	383,548	1,589,936
1832	28,679	97,219	96,553	....	222,452	797,795
1833	54,559	98,927	69,445	....	222,932	976,935
1834	80,433	93,553	78,892	....	252,879	1,165,842
1835	45,605	57,271	91,924	....	194,800	1,030,560
1836	53,665	60,558	60,187	....	174,410	1,268,388
1837	24,573	61,027	52,557	....	138,157	803,653
1838	37,968	28,588	44,184	....	110,740	925,002
1839	22,217	22,037	30,013	....	74,268	719,204
1840	19,351	11,049	20,091	....	50,491	473,345
1841	23,747	10,649	21,141	....	55,537	518,300
1842	29,363	22,496	23,684	....	75,543	493,979
1843	32,759	13,088	18,604	....	64,451	549,419
1844	28,843	22,515	35,023	....	86,381	634,502
1845	28,083	88,623	85,596	....	202,302	1,883,669
1846	44,430	70,005	65,076	....	179,511	1,094,585
1847	104,150	76,006	71,760	....	251,917	2,259,958
1848	113,093	79,979	107,058	....	300,130	1,858,500
1849	61,404	81,962	65,581	....	208,950	1,560,126
1850	88,401	44,909	87,604	21,658	242,572	1,777,517
1851	90,765	102,467	135,597	414	329,244	2,249,511
1852	84,030	67,071	44,088	2,210	198,120	1,491,923
1853	49,016	24,584	39,897	19,843	133,340	1,207,975
1854	30,595	46,242	55,133	3,378	135,349	1,313,535
1855	29,302	91,122	90,193	1,338	211,956	2,120,084
1856	89,333	76,819	47,981	178	214,312	2,064,581
1857	84,519	45,218	38,257	711	168,705	2,162,738
1858	75,347	21,929	32,332	1,992	131,602	1,729,546
1859	61,330	12,060	22,207	4,118	99,715	1,255,077
1860	58,828	122,837	50,578	3,441	235,685	2,251,065
1861	70,877	100,286	22,486	633	194,283	1,116,850
1862	81,902	78,388	100,011	562	260,864	1,597,416
1863	67,985	136,075	102,061	280	306,942	2,878,773
1864	103,383	137,740	33,212	14	274,357	5,935,527
1865	153,723	63,562	39,266	244	256,796	4,729,841
1866	150,332	36,319	44,784	269	231,696	4,324,790
1867	122,808	46,038	41,048	418	210,314	2,961,933
1868	93,091	42,262	44,077	625	180,056	2,522,151
1869	72,924	92,019	65,717	3,549	234,210	3,248,315
1870	66,046	189,422	63,019	33	318,521	3,744,197
1871	105,187	85,867	68,322	38	259,416	2,233,055
1872	71,866	54,370	55,603	115	181,956	1,948,416
1873	83,687	63,888	37,795	376	185,748	2,799,083
1874	112,971	71,442	73,966	....	258,379	2,657,615
1875	33,106	19,270	73,424	4,261	130,062	1,310,140
1876	30,869	96,772	93,481	4,818	225,942	1,650,306
1877	18,015	37,286	37,700	1,294	105,097	1,137,516
1878	14,094	48,170	70,175	11,785	144,226	1,034,144
1879	9,025	91,113	54,806	352	155,297	892,957
1880	20,453	104,434	99,554	19,516	243,958	1,474,152
1881	15,598	139,586	98,861	2,127	256,173	1,601,081
1882	39,045	95,121	123,788	428	258,382	2,741,445
1883	20,852	48,078	48,341	36,867	154,140	1,619,754
1884	22,377	59,835	188,621	13,009	283,794	1,853,753
1885	15,742	106,904	92,051	789	215,576	1,230,556
1886	19,574	32,168	13,505	797	66,044	918,143

THE FISHERIES OF FOREIGN COUNTRIES.

No. 68.—STATEMENT showing the KINDS, QUANTITIES, and VALUES of the YIELD of the FISHERIES in each Province of the DOMINION of CANADA during the Year ending June 30, 1885.

[Compiled from the Annual Report of the Department of Fisheries of the Dominion of Canada for the year 1885.]

FISH AND FISH PRODUCTS.	Unit of quantity.	NOVA SCOTIA.		NEW BRUNSWICK.		QUEBEC.		PRINCE EDWARD ISLAND.		BRITISH COLUMBIA.		ONTARIO.		TOTAL.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Dollars.		*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*
Cod	Cwts	806, 426	3, 427, 311	83, 298	354, 017	164, 529	658, 116	22, 891	97, 288					1, 077, 144	4, 536, 732
Herring:															
Pickled	Barrels	207, 160	828, 640	109, 717	438, 868	53, 542	244, 115	46, 937	187, 748			*a*59, 706	298, 530	477, 062	1, 997, 901
Smoked	Boxes	116, 080	29, 020	1, 313, 535	328, 384	4, 179	1, 045	60	15	*b*56, 000	7, 000			1, 489, 854	365, 464
Frozen	Number			15, 800, 150	94, 801									15, 800, 150	94, 801
Preserved or fresh	Pounds	328, 040	13, 122							36, 600	1, 830			364, 640	14, 952
Lobsters:															
Preserved	do	6, 805, 340	1, 020, 801	5, 236, 252	785, 438	872, 257	130, 838	4, 389, 189	526, 703					17, 303, 038	2, 463, 780
In shell or alive, &c	Tons	1, 887	56, 621	3, 111	93, 330									4, 998	149, 951
Salmon:															
Pickled	Barrels	3, 428	61, 704	191	3, 438	739	7, 390			3, 486	31, 212			7, 844	103, 744
Fresh	Number									204, 700	40, 940			204, 700	40, 940
Fresh in ice	Pounds	445, 658	86, 647	1, 356, 498	271, 300	580, 754	52, 016	8, 455	1, 268					2, 391, 365	411, 231
Preserved in cans	do	30, 570	6, 114	16, 618	3, 324	2, 914	437			5, 208, 816	542, 585			5, 258, 918	552, 460
Smoked	do	27, 465	5, 493	6, 900	1, 380					370, 000	37, 000			404, 365	43, 873
Mackerel:															
Preserved in cans	do	10, 656	1, 598	135, 616	20, 342			393, 462	39, 347					539, 734	61, 287
Pickled	Barrels	108, 136	1, 081, 365	10, 845	108, 450	2, 347	14, 082	24, 424	244, 240					145, 752	1, 448, 137
Haddock	Cwts	170, 026	596, 999	17, 587	61, 555	694	2, 776	833	4, 998	(*c*)	(*c*)			189, 140	666, 328
Hake	do	(*d*)	(*d*)	41, 124	143, 934			14, 520	50, 820					55, 644	194, 754
Pollock	do	49, 098	171, 843	16, 192	56, 672									65, 290	228, 515
Trout	Pounds	128, 075	7, 685	70, 980	4, 259	593, 820	42, 263	71, 120	4, 267	83, 000	5, 810	4, 598, 454	367, 876	5, 545, 449	432, 160
Do	Barrels					139	1, 112					4, 166	41, 660	4, 305	42, 772
Whitefish	Pounds					50, 060	4, 005					2, 867, 500	229, 400	2, 917, 560	233, 405
Do	Barrels											5, 355	53, 550	5, 355	53, 550
Smelts	Pounds	418, 150	25, 089	5, 497, 858	329, 871	8, 850	620	57, 500	3, 450					5, 982, 358	359, 030

a Lake herring.
b Pounds.
c In British Columbia 341,160 haddock and whiting, valued at $12,058, are included with miscellaneous products.
d In Nova Scotia the hake are included with the haddock.

No. 68.—KINDS, QUANTITIES, and VALUES of the YIELD of the FISHERIES in each Province of the DOMINION of CANADA, Year ending June 30, 1885—Continued.

FISH AND FISH PRODUCTS.	Unit of quantity.	NOVA SCOTIA.		NEW BRUNSWICK.		QUEBEC.		PRINCE EDWARD ISLAND.		BRITISH COLUMBIA.		ONTARIO.		TOTAL.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Dollars.		*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*
Sardines	Barrels					6,857	20,571							6,857	20,571
Do	Hhds			55,860	335,160									55,860	335,160
Hake sounds	Pounds	58,090	58,090	48,577	48,577			(*a*)	(*a*)					106,667	106,667
Shad	Number					143,200	13,645	20	12					143,220	13,657
Do	Barrels	4,919	39,358	9,616	96,159									14,535	135,517
Sturgeon	Pounds			26,240	1,574	532,400	26,620			354,500	17,725	1,459,035	72,952	2,372,175	118,871
Halibut	do	1,491,987	86,519	47,360	2,842	30,800	1,848	6,770	406	159,000	9,540			1,735,917	104,155
Seal-skins	Number					9,195	9,195				150,019			9,195	159,214
Oil	Gallons	495,320	322,735	98,142	58,885	142,740	71,370	19,220	12,493	62,730	26,024			818,152	491,507
Miscellaneous, primary, and secondary products			354,169		362,872		417,395		120,374		208,353		278,724		1,741,887
Total			8,283,923		4,005,432		1,719,459		1,293,429		1,078,038		1,342,692		17,722,973

a In Prince Edward Island 16,888 pounds of cod and hake sounds, valued at $10,977.20, are included with miscellaneous products.

No. 69.—Statement showing the TOTAL VALUE of the PRODUCTS of the FISHERIES in each Province of the DOMINION of CANADA for each Year from 1880 to 1885, inclusive.

[From the reports of the minister of marine and fisheries of the Dominion of Canada.]

PROVINCES.	1880.	1881.	1882.	1883.	1884.	1885.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Nova Scotia	6,291,061	6,214,782	7,131,418	7,689,375	8,763,779	8,283,923
New Brunswick	2,744,447	2,930,906	3,192,339	3,185,675	3,780,454	4,005,431
Prince Edward Island	1,675,089	1,955,290	1,855,687	1,272,468	1,085,619	1,293,430
Quebec	2,631,556	2,751,963	1,973,516	2,138,997	1,694,561	1,719,460
Ontario	444,491	509,903	825,457	1,027,033	1,183,724	1,842,692
British Columbia	713,336	1,454,321	1,842,675	1,644,645	1,358,267	1,078,038
Total	14,499,980	15,817,164	16,824,092	16,958,193	17,766,404	17,722,974

No. 70.—Statement showing, by COUNTRIES, the KINDS, QUANTITIES, and VALUES of FISH and FISH OILS, the Produce of the Canadian Fisheries, EXPORTED from the DOMINION of CANADA during the Year ending June 30, 1886.

[From the account relative to the Trade, &c., of the Dominion of Canada.]

KINDS OF FISH AND FISH OILS.	Unit of quantity.	United States.		United Kingdom.		British West Indies.		British Guiana.	
		Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.
FISH.									
Codfish, including ling, haddock, and pollock:			*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*
Fresh	Pounds	276, 469	1, 786						
Dry, salted	Cwts	153, 271	406, 392	21, 068	82, 645	233, 204	669, 345	16, 621	44, 637
Wet, salted	do	12, 715	83, 206						
Pickled	Barrels	25, 064	71, 062	8	14	29, 035	88, 185	11, 986	34, 454
Tongues and sounds	do	1, 304	40, 393	5	41	40	148	4	8
Mackerel:									
Fresh	Pounds	324, 424	13, 276	9, 120	625				
Canned	do	153, 991	8, 901	80, 460	7, 833	1, 912	158	1, 200	92
Pickled	Barrels	60, 867	372, 709	3	11	18, 081	70, 004	3, 815	13, 015
Halibut, fresh	Pounds	233, 140	13, 266						
Herring:									
Fresh or frozen	do	3, 446, 036	29, 724						
Pickled	Barrels	28, 299	78, 172	388	1, 439	23, 656	72, 528	2, 355	7, 972
Smoked	Pounds	5, 133, 261	67, 225	14, 800	282	206, 833	4, 157	17, 563	275
Sea fish, other:									
Fresh	do	1, 756, 564	44, 605						
Pickled	Barrels	1, 531	6, 149	10	40	1, 190	4, 204	1	2
Preserved	Pounds	6, 150	145	550	55	180	15		
Oysters:									
Fresh	Barrels	276	792	1, 679	3, 929	4	14		
Canned	Pounds			1, 216	283				
Lobsters:									
Fresh	Barrels	32, 077	81, 761						
Canned	Pounds	4, 644, 515	499, 779	7, 696, 023	925, 170	23, 984	2, 827	1, 200	125
Bait:									
Fish	Barrels								
Clams or other	do	1	5						
Salmon:									
Fresh	Pounds	2, 157, 700	219, 358	1, 800	160				
Smoked	do	4, 353	979	300	30	85	16		
Canned	do	148, 875	15, 351	3, 621, 740	365, 660	1, 008	131		
Pickled	Barrels	3, 422	32, 225	96	753	608	6, 616	20	176

No. 70.—EXPORTS of FISH and FISH OILS from the DOMINION of CANADA, by countries, 1886—Continued.

KINDS OF FISH AND FISH OILS.	Unit of quantity.	United States.		United Kingdom.		British West Indies.		British Guiana.	
		Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.
FISH—continued.									
Fish, all other:			*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*
Fresh			428, 349		5				
Pickled	Barrels	1, 576	9, 985	8	10	205	649		
FISH OILS.									
Cod	Gallons	12, 818	3, 933	84, 822	41, 017	746	317		
Whale	do			6, 426	2, 664				
All other	do	46, 420	13, 832	2, 475	1, 114			143	50
Total values			2, 490, 910		1, 433, 780		919, 314		100, 806

No. 70.—EXPORTS of FISH and FISH OILS from the DOMINION of CANADA, by COUNTRIES, 1886—Continued.

KINDS OF FISH AND FISH OILS.	Unit of quantity.	British Possessions in South Atlantic.		British Possessions in Australasia.		Newfoundland.		France.		Saint Pierre.	
		Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.
FISH.			*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*
Codfish, including ling, haddock, and pollock, dry, salted	Cwts					300	900			200	575
Tongues and sounds	Barrels					4	32				
Mackerel:											
Fresh	Pounds					250	15				
Pickled	Barrels									4	40
Herring:											
Pickled	do					130	151			16	52
Smoked	Pounds	300	20			8,160	236			575	28
Sea fish, other:											
Pickled	Barrels							51	255		
Preserved	Pounds			60	6						
Oysters, fresh	Barrels					498	959			229	369
Lobsters, canned	Pounds							1,695,230	231,687	2,400	350
Bait, fish	Barrels									256	512
Salmon:											
Canned	Pounds			315,600	32,675						
Pickled	Barrels			826	6,297						
Fish, all other:											
Fresh							42				
Pickled	Barrels							17	65		
FISH OIL.											
Cod	Gallons					160	70				
Total values			20		38,978		2,405		232,007		1,926

No. 70.—EXPORTS of FISH and FISH OILS from the DOMINION of CANADA, by COUNTRIES 1886—Continued.

KINDS OF FISH AND FISH OILS.	Unit of quantity.	French West Indies.		Germany.		Portugal.		Madeira.		Portuguese Possessions in Africa.	
		Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.
FISH.											
Codfish, including ling, haddock, and pollock:			*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*
Dry, salted	Cwts	25,136	73,343	500	1,400	50,706	195,250	613	2,450		
Pickled	Barrels									384	1,275
Tongues and sounds	do					5	26				
Mackerel, pickled	do	1,284	4,715	15	52	15	86				
Herring:											
Pickled	do	632	1,353	75	225	100	230	10	35		
Smoked	Pounds	23,800	599	1,400	28	1,000	45			1,050	15
Lobsters, canned	do			11,424	1,190	836	28				
Total values			80,010		2,895		195,665		2,485		1,290

KINDS OF FISH AND FISH OILS.	Unit of quantity.	Italy.		Spanish West Indies.		Danish West Indies.		Brazil.		Argentine Republic.	
		Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.
FISH.											
Codfish, including ling, haddock, and pollock:			*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*
Dry, salted	Cwts	24,407	101,010	160,276	456,682	3,094	10,528	71,664	338,695	162	648
Pickled	Barrels			80,319	84,813	511	1,550				
Tongues and sounds	do			6	36						
Mackerel, pickled	do			11,856	46,930	504	1,802	2	10		
Herring:											
Pickled	do			12,501	27,166	1,0[illegible]	2,372	5	10		
Smoked	Pounds			75,660	1,348	7,104	262	800	10		
Sea fish, other, pickled	Barrels			104	462	168	588				
Lobsters, canned	Pounds	960	120	2,100	126			14,400	1,590		
Salmon, pickled	Barrels					23	245				
Total values			101,130		617,563		18,242		340,315		648

No. 70.—EXPORTS of FISH and FISH OILS from the DOMINION of CANADA, by COUNTRIES, 1886—Continued.

KINDS OF FISH AND FISH OILS.	Unit of quantity.	Chili.		China.		Hawaiian Islands.		TOTAL EXPORTS.		EXPORTED TO THE UNITED STATES.
		Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Per cent. of total value.
FISH.										
Codfish, including ling, haddock, and pollock:			*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*	*Per cent.*
Fresh	Pounds							276,499	1,786	100.00
Dry, salted	Cwts							761,222	2,384,500	17.04
Wet, salted	do							12,715	83,306	100.00
Pickled	Barrels							97,307	281,353	25.26
Tongues and sounds	do							1,368	40,684	99.28
Mackerel:										
Fresh	Pounds							333,794	13,916	95.40
Canned	do							237,563	16,984	52.41
Pickled	Barrels							96,446	509,374	73.17
Halibut, fresh	Pounds							233,140	13,266	100.00
Herring:										
Fresh or frozen	do							3,446,036	29,724	100.00
Pickled	Barrels							69,256	202,605	38.58
Smoked	Pounds							5,493,806	74,580	90.20
Sea fish, other:										
Fresh	do							1,756,564	44,606	100.00
Pickled	Barrels							3,050	11,606	52.00
Preserved	Pounds							6,940	221	65.61
Oysters:										
Fresh	Barrels							2,686	6,068	13.06
Canned	Pounds							1,216	283	0.00
Lobsters:										
Fresh	Barrels							32,077	81,761	100.00
Canned	Pounds							14,094,572	1,662,992	30.05
Bait:										
Fish	Barrels							256	512	0.00
Clams or other	do							1	5	100.00
Salmon:										
Fresh	Pounds							2,159,500	219,518	99.93
Smoked	do							5,238	1,025	95.51
Canned	do							4,087,228	413,817	3.71
Pickled	Barrels	59	335			271	1,769	5,327	48,416	66.56
Fish, all other:										
Fresh									426,396	99.99
Pickled	Barrels							1,801	10,659	93.21

No. 70.—EXPORTS of FISH and FISH OILS from the DOMINION of CANADA, by COUNTRIES, 1886—Continued.

KINDS OF FISH AND FISH OILS.	Unit of quantity.	Chili.		China.		Hawaiian Islands.		TOTAL EXPORTS.		EXPORTED TO THE UNITED STATES.
		Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Per cent. of total value.
FISH OILS.			*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*	*Per cent.*
Cod	Gallons	....	....	....	....	....	....	98,041	45,837	8.67
Whale	do	....	....	....	....	....	....	6,426	2,664	0.00
All other	do	....	....	2,500	1,250	....	....	51,538	15,746	84.67
Total values	....	....	825	....	1,250	....	1,769	....	6,598,743	36.26

No. 71.—STATEMENT showing the KINDS, QUANTITIES, and VALUES of the FISHERY PRODUCTS EXPORTED from NEWFOUNDLAND during the Year ending December 31, 1883.

[From the Bulletin of the United States Fish Commission, 1885.]

ARTICLES.	Quantities.	Price per unit.	Values.
		Dollars.	*Dollars.*
Dry codfish ....quintals..	1,163,934	3 00 to 5 20	4,725,960
Core fish ....do....	1,372	2 00	2,744
Pickled codfish ....do....	947	2 00	1,894
Pickled Labrador herring ....barrels..	19,001	3 20	60,803
Pickled shore herring ....do....	44,383	2 50	110,958
Pickled salmon ....tierces..	4,046	22 00	89,012
Pickled mackerel ....barrels..	4	3 00	12
Pickled trout ....do....	582¾	8 00	4,262
Ling ....quintals..	44	2 00	88
Haddock ....do....	470	2 60	1,222
Turbot ....barrels..	10	10 00	100
Caplin ....do....	115	50	58
Pickled halibut ....do....	4	6 00	24
Lobsters ....pounds..	505,968	10	50,597
Cod-roes ....barrels..	179	3 00	537
Tongues and sounds ....do....	54	3 00	162
Frozen herring ....do....	5,240	2 00	10,480
Fish guano ....tons..	193¼	....	6,000
Codfish oil ....tuns..	2,936¼	124 00	364,157
Codfish oil, refined ....do....	404	192 00	77,568
Seal oil ....do....	5,340¾	124 00	662,253
Herring oil ....do....	14	96 00	1,344
Whale oil ....do....	38½	108 00	4,158
Blubber ....do....	54	14 00	756
Seal-skins	322,603	1 00	322,603
Seals	300	2 00	600
Whalebone ....cwts..	25	15 00	375
Total	....	....	6,498,727

No. 72.—STATEMENT showing, by COUNTRIES, the QUANTITIES of FISHERY PRODUCTS EXPORTED from NEWFOUNDLAND in 1883.

[From the Bulletin of the United States Fish Commission, 1885.]

ARTICLES.	EXPORTED TO—						
	United Kingdom.	Canada.	The United States.	The West Indies.	Spain, Portugal, and Gibraltar.	All other countries.	TOTAL EXPORTED.
Dry codfish ....quintals..	45,107	36,055	45,693	98,918	573,181	*a*364,985	1,163,934
Core fish ....do....	....	....	1,300	....	....	*b*72	1,372
Pickled codfish ....do....	....	947	....	....	....	....	947
Pickled herring, Labrador, ...barrels..	5,979	4,858	8,164	....	....	....	19,001
Pickled herring, shore, barrels	....	31,106	8,233	4,971	....	673	44,383
Pickled salmon ....tierces..	623	781½	1,964½	502	7½	*c*167½	4,046
Pickled mackerel .. barrels..	....	....	3	1	....	....	4
Pickled trout ....do....	15	23	430	64¾	....	....	582¾
Ling ....quintals..	....	....	....	44	....	....	44
Haddock ....do....	....	....	....	470	....	....	470
Turbot ....barrels..	....	....	....	3	....	*b*7	10
Dried caplin ....do....	94	....	....	21	....	....	115
Pickled halibut ....do....	....	4	....	....	....	....	4
Lobsters in tins ....pounds..	323,568	105,648	76,752	....	....	....	505,968
Cod-roes ....barrels..	135	....	....	....	....	*b*44	179
Tongues and sounds ...do....	13	....	35	....	....	*b*6	54
Frozen herring ....do....	....	550	4,690	....	....	....	5,240
Fish guano ....tons..	193¼	....	....	....	....	....	193¼
Codfish oil ....tuns..	2,503	279½	143½	2	....	*b*11	2,936¼
Codfish oil, refined ....do....	219	59	124	....	....	....	404
Seal oil ....do....	3,681½	391½	6½	....	....	*d*1,261½	5,340¾
Herring oil ....do....	14	....	....	....	....	....	14
Whale oil ....do....	38	½	....	....	....	....	38½
Blubber ....do....	1	53	....	....	....	....	54
Seal-skins	320,912	1,691	....	....	....	....	322,603
Seals	....	300	....	....	....	....	300
Whalebone ....cwts..	25	....	....	....	....	....	25

a Of this amount 293,094 quintals went to Russia. *b* To Jersey. *c* Of this amount 1,220½ tons went to Hamburg. *d* Of this amount 164½ tierces went to Italy.

No. 73.—STATEMENT showing the KINDS, QUANTITIES, and VALUES of the FISHERY PRODUCTS EXPORTED from NEWFOUNDLAND to the United States during the Year ending December 31, 1883.

[From the Bulletin of the United States Fish Commission, 1885.]

ARTICLES.	Quantities.	Price per unit.	Values.
		Dollars.	*Dollars.*
Dry codfish .... quintals..	45,693	5 20	237,604
Core fish .... do ...	1,800	2 00	2,600
Pickled Labrador herring .... barrels..	8,164	3 20	26,125
Pickled shore herring .... do ...	8,233	2 50	20,583
Pickled salmon .... tierces..	1,964½	22 00	43,216
Pickled mackerel .... barrels..	3	3 00	9
Pickled trout .... do....	430	8 00	3,440
Preserved lobsters in tins .... pounds..	76,752	10	7,675
Cod tongues and sounds .... barrels..	35	3 00	105
Frozen herring .... do....	4,690	2 00	9,380
Codfish oil .... tuns....	143¼	124 00	17,763
Codfish oil, refined .... do....	124	192 00	23,808
Seal oil .... do....	6½	124 00	806
Total	....	....	393,114

No. 74.—STATEMENT showing the KINDS and QUANTITIES of the FISH PRODUCTS EXPORTED from LABRADOR during the Year ending December 31, 1883.

[From the Report of the Receiving-General of Customs for Newfoundland.]

FISHERY PRODUCTS.	Quantities.
Dried codfish .... quintals..	368,089
Pickled salmon .... tierces..	809
Preserved salmon .... tins..	23,000
Pickled trout .... barrels..	547
Pickled herring .... do...	54,162
Seal skins .... number..	490
Seal oil .... tuns..	26
Cod oil .... do...	21
Blubber .... do...	3

No. 75.—STATEMENT showing the KINDS and VALUES of the PRODUCTS of the FRENCH FISHERIES from 1874 to 1884, inclusive.

[From the British Statistical Abstract for Foreign Countries.]

YEAR.	COD FISHERIES.		HOME FISHERIES.		TOTAL.	OYSTERS INCLUDED IN HOME FISHERIES.	
	New-foundland.	Iceland.	In boats.*a*	On foot.*a*		Quantities.	Value.
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Number.*	*Francs.*
1874	8,191,519	6,762,861	55,410,096	3,020,282	73,384,258	....	....
1875	7,734,646	7,651,786	56,992,064	4,788,096	77,166,542	97,227,000	2,879,709
1876	9,065,970	7,084,901	67,379,596	5,460,124	88,990,591	160,267,396	2,592,707
1877	8,059,898	8,252,796	64,680,434	6,284,063	87,227,191	194,354,081	1,502,951
1878	7,141,822	7,966,166	65,873,911	5,989,828	86,971,727	169,397,046	1,854,564
1879	6,902,436	7,554,354	65,998,937	7,534,122	88,079,849	157,579,968	1,553,147
1880	6,433,948	6,856,850	66,235,093	7,891,777	86,917,668	144,552,625	1,809,791
1881	7,882,255	5,876,607	60,824,798	8,086,898	82,670,058	374,985,770	2,061,753
1882	8,703,221	7,409,160	67,934,676	8,915,944	92,963,001	155,761,899	2,818,727
1883	10,141,511	7,916,898	89,169,012		107,226,921	157,666,246	....
1884	7,200,687	6,495,356	74,265,101		87,961,124	119,277,795	....

a Not separately stated, 1883 and 1884.

NOTE.—1 franc = 19.3 cents.

No. 76.—STATEMENT showing, by COUNTRIES, the QUANTITIES and VALUES of FISH IMPORTED into and EXPORTED from FRANCE during each of the Years 1883, 1884, and 1885.

[From the Tableau Général du Commerce de la France.]

IMPORTS FOR CONSUMPTION.

KINDS OF FISH, AND COUNTRIES FROM WHICH IMPORTED.	1885.		1884.		1883.	
FRESH-WATER FISH.						
Fresh:	*Kilos.*	*Francs.*	*Kilos.*	*Francs.*	*Kilos.*	*Francs.*
Germany	697, 889		526, 116		563, 421	
Netherlands	985, 512		1, 086, 618		1, 748, 999	
Other	1, 322, 984		1, 080, 285		1, 229, 331	
Total	3, 006, 385	2, 056, 066	2, 693, 019	2, 558, 368	3, 541, 751	3, 541, 751
Prepared:						
England	36, 854		11, 220		11, 792	
Other	23, 249		6, 607		3, 045	
Total	60, 103	162, 278	17, 827	48, 133	14, 837	39, 564
SALT-WATER FISH.						
Cod, dried or salted:						
Saint Pierre	48, 077, 015		44, 923, 581		42, 265, 444	
Other	36, 295		25, 141		26, 655	
Total	48, 113, 310	31, 273, 652	44, 948, 722	26, 969, 233	42, 292, 099	25, 375, 259
Stock fish:						
Norway	143, 740		201, 164		141, 800	
Netherlands	131, 526		91, 942		1, 919	
Italy	126, 779		126, 448		162, 056	
Other	23, 380		32, 026		55, 664	
Total	425, 425	340, 340	421, 580	337, 263	361, 439	325, 295
Herring, fresh:						
England	1, 208, 109		1, 062, 342		631, 258	
Other	8, 862		10, 412		20, 057	
Total	1, 216, 971	425, 940	1, 072, 754	375, 464	651, 315	358, 228
Herring, dried, salted, or smoked	126, 784	38, 035	141, 869	49, 654	943, 457	396, 252
Other fresh:						
England	5, 229, 979		4, 895, 888		3, 812, 120	
Belgium	2, 280, 864		2, 015, 221		1, 178, 411	
Spain	840, 095		379, 949		901, 413	
Other	1, 167, 920		1, 154, 717		778, 274	
Total	9, 518, 858	9, 518, 858	8, 445, 775	7, 178, 999	6, 670, 218	6, 336, 707
Other dried, salted, or smoked:						
Spain	2, 881, 602		2, 796, 480		3, 228, 995	
Algiers	546, 259		509, 297		1, 200, 568	
Saint Pierre	322, 554		541, 724		605, 480	
Other	283, 616		193, 425		346, 249	
Total	4, 034, 131	4, 034, 131	4, 040, 926	3, 636, 833	5, 381, 292	3, 379, 132
Salted or in oil, sardines:						
Algiers	448, 935		222, 182		285, 002	
Spain	327, 059		154, 523		105, 139	
Other	266, 272		96, 709		94, 886	
Total	1, 042, 266	2, 084, 532	473, 414	946, 828	485, 027	970, 054
Salted or in oil, other:						
England	193, 090		362, 649		874, 690	
Algiers	175, 365					
Other	269, 087		531, 358		1, 004, 072	
Total	637, 542	1, 434, 470	894, 007	2, 056, 216	1, 878, 762	4, 331, 153
LOBSTERS.						
Belgium	465, [illegible]34		741, 552		563, 184	
England	324, 931		339, 353		341, 216	

No. 76.—FISH IMPORTED into and EXPORTED from FRANCE during each of the Years 1883, 1884, and 1885—Continued.

IMPORTS FOR CONSUMPTON—Continued.

KINDS OF FISH, AND COUNTRIES FROM WHICH IMPORTED.	1885.		1884.		1883.	
	Kilos.	*Francs.*	*Kilos.*	*Francs.*	*Kilos.*	*Francs.*
LOBSTERS—continued.						
United States	959, 015		1, 185, 988			
Other	446, 434		231, 449		676, 138	
Total	2, 196, 114	5, 380, 479	2, 498, 342	6, 245, 855	1, 580, 538	4, 741, 614
OYSTERS.						
Total fresh		150, 850		905, 860		2, 090, 119
Total pickled	8, 926	20, 083	21, 075	47, 418	21, 566	53, 915
MUSCLES AND OTHER SHELL-FISH IN THE SHELL.						
Belgium	5, 851, 169		4, 855, 263		5, 151, 755	
Other	59, 873		36, 711		13, 134	
Total	5, 911, 042	1, 182, 208	4, 891, 974	978, 895	5, 164, 889	1, 032, 978
ROES OF COD AND MACKEREL						
	Net.		*Net.*		*Net.*	
Norway	5, 400, 659		3, 318, 539		3, 414, 172	
Netherlands	150, 050		300, 529		94, 716	
United States	299, 877		260, 825		120, 500	
Saint Pierre	300, 824		369, 810		265, 961	
Other	474, 970		56, 358		241, 342	
Total	6, 626, 380	2, 179, 233	4, 306, 061	1, 937, 727	4, 136, 688	2, 895, 682
Total value of imports		60, 281, 155		54, 272, 246		61, 357, 703

EXPORTS.

KINDS OF FISH, AND COUNTRIES TO WHICH EXPORTED.	1885.		1884.		1883.	
	Kilos.	*Francs.*	*Kilos.*	*Francs.*	*Kilos.*	*Francs.*
FRESH-WATER FISH.						
Fresh:						
Germany	33, 902		51, 838		41, 389	
Spain	9, 147					
Other	12, 361		10, 175		6, 933	
Total	55, 410	52, 639	62, 013	58, 912	48, 322	48, 322
SALT-WATER FISH.						
Cod, dried or salted:						
Spain	8, 231, 405		6, 668, 582		4, 863, 768	
Italy	3, 195, 545		2, 416, 585		1, 881, 574	
Algiers	1, 059, 579		991, 128		905, 251	
Other	1, 364, 971		1, 396, 791		1, 461, 956	
Total	13, 851, 500	9, 008, 475	11, 473, 086	6, 883, 852	9, 112, 549	6, 196, 533
Stock fish	13, 653	10, 922	15, 778	12, 622	14, 956	13, 460
Herring, fresh:						
England	2, 312, 187		790, 540		Not stated	
Other	516, 999		166, 320			
Total	2, 829, 186	1, 131, 674	956, 860	382, 744	96, 139	52, 876
Herring, dried, salted, or smoked:						
England	1, 265, 363		829, 124		35, 515	
Other	1, 139, 451		1, 343, 795		1, 903, 864	
Total	2, 404, 814	793, 588	2, 172, 919	760, 522	1, 939, 379	852, 887
Other, fresh:						
Germany	76, 911		51, 015		73, 383	
Belgium	70, 545		213, 702		75, 098	
Spain	65, 805				64, 586	
Other	137, 158		205, 232		92, 499	
Total	350, 419	350, 419	469, 949	399, 457	305, 566	290, 288

No. 76.—FISH IMPORTED into and EXPORTED from FRANCE during each of the Years 1883, 1884, and 1885—Continued.

EXPORTS—Continued.

KINDS OF FISH, AND COUNTRIES TO WHICH EXPORTED.	1885.		1884.		1883.	
SALT-WATER FISH—continued.						
Other dried, salted, or smoked:	*Kilos.*	*Francs.*	*Kilos.*	*Francs.*	*Kilos.*	*Francs.*
Réunion	232, 497	....	196, 963	....	89, 627	....
Belgium	64, 438	....	....	....	147, 859	....
Other	357, 332	....	239, 100	....	538, 766	....
Total	654, 267	752, 407	436, 063	479, 660	776, 252	1, 319, 628
Salted or in oil, sardines:						
England	3, 406, 668	....	3, 963, 375	....	6, 134, 883	....
United States, Atlantic	660, 625	....	912, 723	....	1, 900, 689	....
Germany	512, 346	....	523, 849	....	579, 044	....
Belgium	318, 436	....	438, 977	....	397, 074	....
Argentine Republic	197, 205	....	573, 365	....	622, 677	....
Other	2, 006, 814	....	3, 075, 802	....	3, 942, 127	....
Total	7, 102, 094	14, 559, 292	9, 488, 091	19, 459, 587	13, 575, 994	27, 830, 787
Salted or in oil, other:						
England	121, 883	....	391, 848	....	177, 415	....
United States, Atlantic	69, 734	....	....	....	....	....
Other	404, 670	....	540, 231	....	514, 830	....
Total	596, 287	1, 371, 460	932, 079	2, 190, 886	692, 245	1, 626, 775
LOBSTERS.						
Belgium	107, 099	....	80, 269	....	65, 569	....
Other	16, 392	....	9, 908	....	12, 676	....
Total	123, 491	302, 553	90, 177	225, 443	78, 245	234, 735
OYSTERS.						
Fresh:						
England	....	3, 028, 402	....	2, 550, 290	....	....
Other	....	321, 255	....	210, 182	....	....
Total	....	3, 349, 657	....	2, 760, 472	....	1, 882, 860
Pickled	....	....	....	....	1, 678	4, 183
MUSCLES AND OTHER SHELL-FISH IN THE SHELL.						
England	89, 200	....	134, 098	....	91, 692	....
Other	73, 805	....	71, 409	....	67, 452	....
Total	163, 005	57, 051	205, 507	71, 927	159, 144	71, 615
ROES OF COD AND MACKEREL.	*Net.*					
Spain	67, 139	....	Not stated	....	Not stated	....
Other	360	....	....do	....	....do	....
Total	67, 499	23, 625	4, 503	2, 026	72, 589	50, 777
Total value of exports	....	31, 758, 762	....	33, 678, 619	....	40, 475, 726

NOTE.—One kilogram equal to 2.204 pounds; one franc equal to 19.3 cents.

No. 77.—STATEMENT showing, by COUNTRIES, the QUANTITIES and VALUES of FISH IMPORTED into and EXPORTED from GERMANY during the Years ending March 31, 1883, 1884, and 1885.

[From the "Statistik des Deutschen Reichs."]

IMPORTS.

KINDS OF FISH, AND COUNTRIES FROM WHICH IMPORTED.	1885.		1884.		1883.	
Fresh:	100 *kilog.*	*Marks.*	100 *kilog.*	*Marks.*	100 *kilog.*	*Marks.*
Hamburg and Altona	44,992		40,495		31,818	
Denmark	80,241		89,658		46,719	
Netherlands	20,827		20,692		21,746	
Sweden	17,842		9,713		10,480	
All other	28,075		28,581		28,277	
Total	191,977	9,599,000	189,139	16,697,000	139,039	10,685,000
Stockfish, dried:						
Netherlands	7,422		6,259		5,465	
All other	4,367		3,822		3,789	
Total	11,789	613,000	10,081	695,000	9,254	668,000
Fish, salted or dried, except stockfish and herring:						
Netherlands	38,714		28,842		22,539	
Hamburg and Altona	5,159		4,828		3,778	
Denmark	4,299		3,709		5,085	
All other	3,463		3,033		2,203	
Total	51,635	4,647,000	40,412	5,658,000	33,555	4,698,000
All other prepared fish:						
Hamburg and Altona	1,203					
Italy	338					
France	905					
All other	593					
Total	3,039	575,000				
Herring, salted, in barrels:	*Barrels.*		*Barrels.*		*Barrels.*	
Hamburg and Altona	95,802		102,463		95,124	
Great Britain	570,400		501,396		404,815	
Netherlands	193,077		160,875		146,601	
Norway	148,461		178,375		192,575	
All other	13,908		16,937		28,736	
Total	1,021,648	29,628,000	960,046	29,761,000	867,851	32,092,000
Herring, salted, not in barrels:	100 *kilog.*					
Bremen	294					
Hamburg and Altona	1,831					
Great Britain	437					
Netherlands	758					
All other	221					
Total	3,041	304,000				
Oysters:			100 *kilog.*		100 *kilog.*	
Hamburg and Altona	2,523		1,467		1,326	
Netherlands	2,834		2,180		1,409	
All other	1,543		1,108		1,195	
Total	6,900	1,042,000	4,755	713,000	3,930	589,000
Lobsters and other shell-fish:						
Hamburg and Altona	1,034		2,012		1,752	
All other	389		642		740	
Total	1,423	211,000	2,654	504,000	2,492	473,000
Total value of imports		46,619,000		53,938,000		55,205,000

No. 77.—FISH IMPORTED into and EXPORTED from GERMANY during the Years ending March 31, 1883, 1884, and 1885—Continued.

EXPORTS.

KINDS OF FISH, AND COUNTRIES TO WHICH EXPORTED.	1885.		1884.		1883.	
Fresh:	*100 kilog.*	*Marks.*	*100 kilog.*	*Marks.*	*100 kilog.*	*Marks.*
Hamburg and Altona	13,939		11,166		12,217	
Russia	29,078		26,487		28,807	
Austria	2,164		1,901		1,718	
France	2,810		9,228		7,847	
All other	4,421		5,196		5,522	
Total	51,912	3,034,000	53,928	10,786,000	56,111	11,222,000
Stockfish, dried:						
Russia	23		76		137	
All other	73		53		70	
Total	96	5,000	129	8,000	207	14,000
Fish, salted or dried except stockfish and herring:						
Hamburg and Altona	3,597		2,270		2,206	
Austria	1,398		1,032		1,012	
Netherlands	279		818		251	
All other	747		743		586	
Total	6,021	723,000	4,858	610,000	4,005	561,000
All other prepared fish:						
Hamburg and Altona	352					
Austria	181					
Bremen	59					
All other	89					
Total	681	130,000				
Herring, salted, in barrels:	*Barrels.*		*Barrels.*		*Barrels.*	
Russia	39		121		92	
Austria	551		482		478	
All other	821		603		344	
Total	1,411	41,000	1,206	37,000	914	34,000
Herring, salted, not in barrels:						
Austria	318					
Russia	37					
Switzerland	37					
All other	70					
Total	462	46,000				
Oysters:	*100 kilog.*		*100 kilog.*		*100 kilog.*	
Sweden	11		24		75	
Denmark	94		124		31	
All other	43		69		55	
Total	148	22,000	217	23,000	161	24,000
Lobsters and other shell-fish:						
Bremen	851		1,169		1,366	
Hamburg and Altona	704		832		797	
All other	52		218		185	
Total	1,607	161,000	2,219	403,000	2,348	446,000
Total value of exports		4,768,000		11,867,000		12,301,000

NOTES.—1. Hamburg-Altona being a free port outside of the German Customs Union, the imports from and exports to that port are located as foreign imports and exports, being in fact receipts and shipments from and to foreign countries via Hamburg.—2. One kilogram equal to 2.204 pounds, and one mark equal to 23.8 cents.

No. 78.—STATEMENT showing the QUANTITIES and VALUES of HERRING IMPORTED into GERMANY during each Year from 1875 to 1884, inclusive.

[From the "British Statistical Abstract for Foreign Countries."]

YEARS.	Herrings.		YEAR.	Herrings.	
	Tonnen.	*Marks.*		*Tonnen.*	*Marks.*
1875	654, 000	23, 500, 000	1880	737, 137	25, 800, 000
1876	704, 227	28, 200, 000	1881	854, 557	29, 055, 000
1877	666, 726	26, 700, 000	1882	875, 000	29, 317, 000
1878	722, 089	27, 400, 000	1883	867, 351	32, 092, 000
1879	641, 144	24, 400, 000	1884	960, 046	29, 761, 000

NOTE.—1 mark = 23.8 cents; 1 tonne = 2,204.621 pounds.

No. 79.—STATEMENT showing the KINDS, QUANTITIES, and VALUES of the PRODUCTS of the DUTCH FISHERIES for each Year from 1874 to 1884, inclusive.

[From the "British Statistical Abstract for Foreign Countries."]

YEARS.	COD.		HERRING.	
	Quantity.	Value.	Quantity.	Value.
	Tons.	*Gulden.*	*Thousands.*	*Gulden.*
1874	26, 090	(*a*)	106, 446	(*a*)
1875	24, 682	(*a*)	90, 414	(*a*)
1876	24, 338	(*a*)	116, 560	(*a*)
1877	27, 512	(*a*)	139, 062	(*a*)
1878	22, 236	(*a*)	112, 792	(*a*)
1879	21, 623	(*a*)	163, 298	(*a*)
1880	21, 888	(*a*)	227, 135	(*a*)
1881	22, 858	(*a*)	197, 573	3, 983, 000
1882	22, 890	(*a*)	228, 836	4, 018, 000
1883	23, 396	(*a*)	209, 637	4, 970, 000
1884	20, 885	(*a*)	283, 990	4, 611, 000

a Not stated.

NOTE.—One gulden equals 40.2 cents.

No. 80.—STATEMENT showing the KINDS, QUANTITIES, and VALUES of the PRODUCTS of the NORWEGIAN FISHERIES for each Year from 1874 to 1884, inclusive.

[From the "British Statistical Abstract for Foreign Countries."]

YEARS.	COD.		HERRING.		MACKEREL.		LOBSTER.		OTHER.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Number.	*Kroner.*	*Hecto.*	*Kroner.*	*Number.*	*Kroner.*	*Number.*	*Kroner.*	*Number.*	*Kroner.*
1874	47, 687, 000	14, 656, 000	1, 215, 000	5, 892, 000	6, 880, 000	796, 000	....	296, 000	1, 680, 000	23, 320, 000
1875	57, 788, 000	15, 405, 000	1, 269, 000	5, 658, 000	5, 250, 000	719, 000	....	337, 000	1, 677, 000	23, 796, 000
1876	40, 101, 000	10, 864, 000	1, 022, 000	7, 970, 000	4, 192, 000	621, 000	1, 141, 000	355, 000	2, 466, 000	22, 276, 000
1877	66, 805, 000	19, 411, 000	1, 112, 000	6, 790, 000	4, 546, 000	703, 000	987, 000	291, 000	2, 246, 000	29, 441, 000
1878	50, 833, 000	12, 932, 000	850, 000	4, 786, 000	5, 739, 000	671, 000	1, 107, 000	315, 000	2, 349, 000	21, 054, 000
1879	63, 494, 000	13, 682, 000	661, 000	4, 920, 000	6, 080, 000	681, 000	1, 118, 000	342, 000	1, 715, 000	21, 340, 000
1880	68, 273, 000	12, 540, 000	994, 000	7, 103, 000	5, 744, 000	696, 000	1, 206, 000	405, 000	1, 836, 000	22, 580, 000
1881	55, 153, 000	10, 925, 000	877, 000	4, 962, 000	8, 165, 000	769, 000	1, 146, 000	377, 000	2, 583, 000	19, 616, 000
1882	50, 338, 000	12, 724, 000	503, 000	3, 451, 000	5, 064, 000	699, 000	1, 256, 000	423, 000	2, 820, 000	20, 117, 000
1883	33, 403, 000	9, 942, 000	1, 131, 000	8, 447, 000	5, 116, 000	742, 000	1, 224, 000	440, 000	4, 757, 000	24, 328, 000
1884	50, 436, 000	15, 536, 000	764, 000	4, 295, 000	5, 349, 000	735, 000	1, 100, 000	418, 000	3, 402, 000	24, 386, 000

NOTE.—One kroner equals 26.8 cents; one hectoliter equals 2.8378 bushels.

No. 81.—STATEMENT showing the KINDS, QUANTITIES, and VALUES of FISH EXPORTED from NORWAY during each Year from 1874 to 1884, inclusive.

[From the "British Statistical Abstract for Foreign Countries."]

YEARS.	Fresh.	Cod, dried or split.		Herrings.	
	Kroner.	*Kilograms.*	*Kroner.*	*Hectoliters.*	*Kroner.*
1874	687,200	....	16,872,000	....	17,631,200
1875	791,600	57,692,000	18,499,200	1,037,824	17,176,800
1876	727,300	52,722,000	20,897,300	1,040,645	19,193,600
1877	677,400	67,680,000	21,640,100	795,298	13,503,500
1878	799,700	56,986,000	19,460,100	785,821	10,047,900
1879	839,200	63,340,000	18,142,600	780,945	14,232,100
1880	915,100	72,215,000	17,578,700	586,383	9,504,200
1881	988,200	60,795,000	22,146,800	1,090,623	16,280,300
1882	835,500	55,028,000	24,880,100	719,095	12,150,900
1883	1,068,600	42,360,000	21,529,000	663,982	11,567,000
1884	1,398,600	51,541,000	18,809,000	740,807	10,555,700

YEARS.	Other salted fish.		Anchovies.		Lobsters.	
	Hectoliters.	*Kroner.*	*Hectoliters.*	*Kroner.*	*Number.*	*Kroner.*
1874	....	672,000	....	237,200	749,000	284,800
1875	94,811	935,200	2,443	163,600	881,000	331,200
1876	106,056	1,062,500	5,982	427,000	1,270,000	482,700
1877	109,679	1,006,000	4,563	265,700	1,070,000	374,400
1878	71,507	597,100	7,131	350,300	1,081,000	432,500
1879	99,904	809,300	7,420	423,800	1,019,000	407,800
1880	118,348	805,900	11,755	704,100	991,000	396,300
1881	167,275	1,574,200	15,574	734,500	1,002,000	400,800
1882	113,755	812,800	10,859	523,100	1,324,000	529,800
1883	80,158	567,000	9,141	306,000	1,089,000	490,000
1884	92,962	608,700	9,313	251,400	940,000	441,900

NOTE.—One kroner = 26.8 cents; 1 kilogram = 2.204 pounds; 1 hectoliter = 26.417 gallons.

No. 82.—STATEMENT showing the QUANTITIES and VALUES of FISH IMPORTED into and EXPORTED from SWEDEN during each Year from 1873 to 1883, inclusive.

[From the "British Statistical Abstract for Foreign Countries."]

YEAR.	IMPORTED.		EXPORTED.
	Herring.		Fish, fresh and salted.
	Cubic meters.	*Kroner.*	*Kroner.*
1873	29,680	5,670,000	237,000
1874	30,450	5,817,000	263,000
1875	33,652	7,715,000	275,000
1876	34,748	8,283,000	210,000
1837	27,911	8,000,000	409,000
1878	18,798	4,980,000	932,000
1879	20,305	4,843,000	424,000
1880	26,186	7,820,000	624,000
1881	34,256	5,545,000	1,094,000
1882	25,164	4,965,000	8,952,000
1883	26,592	5,246,000	2,901,000

NOTE.—One cubic meter = 1.308 cubic yards; 1 kroner = 26.8 cents.

No. 83.—STATEMENT showing the QUANTITIES and VALUES of FISH IMPORTED into ITALY during each Year from 1874 to 1884, inclusive.

[From the "British Statistical Abstract for Foreign Countries."]

YEARS.	Fish, of all sorts.	
	Kilograms.	*Lire.*
1874	43, 289, 000	21, 968, 000
1875	38, 108, 000	20, 827, 000
1876	37, 185, 000	20, 612, 000
1877	37, 184, 000	20, 302, 000
1878	33, 423, 000	18, 811, 000
1879	39, 690, 000	21, 326, 000
1880	43, 204, 000	23, 464, 000
1881	44, 516, 000	26, 214, 000
1882	39, 109, 000	28, 268, 000
1883	39, 327, 000	27, 793, 000
1884	37, 415, 000	26, 921, 000

NOTE.—One kilogram = 2.204 pounds; 1 lira = 19.3 cents.

No. 84.—STATEMENT showing the QUANTITIES and VALUES of FISH IMPORTED into and EXPORTED from PORTUGAL during each Year from 1874 to 1884, inclusive.

[From the "British Statistical Abstract for Foreign Countries."]

YEARS.	Imports of cod fish.		EXPORTS.			
			Sardines.		All other fish.	
	Kilog.	*Milreis.*	*Kilog.*	*Milreis.*	*Kilog.*	*Milreis.*
1874	16, 706, 000	1, 227, 000	4, 490, 900	154, 800	3, 630, 000	142, 000
1875	16, 702, 800	1, 374, 000	4, 698, 600	173, 800	3, 543, 000	169, 000
1876	15, 398, 000	1, 355, 000	4, 139, 700	143, 000	4, 469, 000	144. 000
1877	16, 758, 000	1, 409, 000	(a)	(a)	7, 204, 000	297, 000
1878	16, 623, 000	1, 306, 000	2, 297, 300	83, 400	3, 947, 000	161, 000
1879	17, 636, 800	1, 272, 000	2, 861, 000	123, 900	1, 028, 000	84, 000
1880	19, 607, 600	1, 397, 000	3, 848, 300	202, 400	4, 325, 000	262, 000
1881	20, 735, 000	1, 395, 000	2, 784, 000	124, 000	5, 902, 000	311, 000
1882	19, 896, 000	1, 456, 000	3, 143, 000	129, 000	4, 846, 000	456, 000
1883	17, 380, 000	1, 361, 000	6, 024, 000	235, 000	4, 162, 000	421, 000
1884	20, 132, 000	1, 576, 000	8, 588, 000	285, 000	4, 908, 000	435, 000

a None reported.

NOTE.—1 kilogram = 2.204 pounds; 1 milreis = $1.08.

No. 85.—STATEMENT showing the QUANTITIES and VALUES of FISH IMPORTED into and EXPORTED from RUSSIA in EUROPE during each Year from 1874 to 1884, inclusive.

[From the "British Statistical Abstract for Foreign Countries."]

YEARS.	Imports of salted herrings.		Exports of caviare.	
	Barrels.	*Silver rubles.*	*Poods.*	*Silver rubles.*
1874	430, 430	5, 095, 600	106, 989	1, 105, 365
1875	432, 622	4, 832, 255	96, 903	1, 052, 994
1876	364, 694	4, 037, 127	92, 299	984, 515
1877	241, 878	2, 955, 638	57, 569	1, 001, 767
1878	427, 275	5, 362, 449	124, 877	1, 672, 745
1879	336, 504	4, 347, 087	201, 746	1, 876, 343
1880	(a)	6, 302, 000	185, 223	2, 156, 000
1881	507, 670	6, 822, 000	174, 245	2, 233, 000
1882	244, 584	3, 073, 000	226, 016	3, 592, 000
1883	(a)	6, 875, 000	251, 000	3, 150, 000
1884	(a)	8, 644, 000	304, 000	3, 416, 000

a Not stated.

NOTE.—1 pood = 36 pounds; 1 ruble = 58.2 cents.

No. 86.—STATEMENT showing the QUANTITIES and VALUES of CODFISH IMPORTED into SPAIN during each Year from 1874 to 1884 inclusive.

[From the "British Statistical Abstract for Foreign Countries."]

YEARS.	Codfish.		YEARS.	Codfish.	
	Kilogram.	*Pesetas.*		*Kilogram.*	*Pesetas.*
1874	39, 350, 000	19, 676, 000	1880	44, 835, 000	17, 734, 000
1875	34, 911, 000	17, 455, 000	1881	43, 101, 000	18, 964, 000
1876	31, 665, 000	15, 832, 000	1882	42, 756, 000	20, 523, 000
1877	32, 939, 000	15, 811, 000	1883	42, 892, 000	19, 841, 000
1878	35, 324, 000	16, 955, 000	1884	48, 460, 000	30, 981, 000
1879	38, 601, 000	16, 984, 000			

NOTE.—1 kilogram=2.204 pounds; 1 peseta=19.3 cents.

No. 87.—STATEMENT showing, by Countries, the QUANTITIES and VALUES of FISH IMPORTED into and EXPORTED from the UNITED KINGDOM during the Years 1883, 1884, and 1885.

[From the "Accounts relative to Trade and Navigation of the United Kingdom."]

IMPORTS.

KINDS OF FISH.	Countries.	1885.		1884.		1883.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Fresh (not of British taking).	Holland ....cwts ..	230, 390	£285, 453	225, 307	£279, 516	211, 524	£271, 059
	United States.......cwts ..	208, 057	150, 341	153, 841	114, 839	129, 281	97, 206
	Norway ....cwts ..	166, 170	148, 609	60, 762	65, 377	37, 033	68, 009
	All other ....cwts ..	133, 750	129, 701	80, 529	95, 088	49, 968	96, 171
	Total ....cwts ..	788, 367	714, 104	520, 439	554, 770	427, 826	532, 445
	Foreign exports ...cwts ..	2, 055	3, 569	630	1, 378	1, 136	2, 183
	Net imports...cwts ..	786, 312	710, 535	519, 809	553, 392	426, 690	530, 262
Cured or salted....	Norway ....cwts ..	116, 744	109, 789	137, 186	136, 867	168, 924	181, 436
	France ....cwts ..	74, 911	208, 220	80, 074	241, 215	99, 201	314, 473
	United States.......cwts ..	146, 902	359, 075	178, 109	433, 113	174, 694	468, 102
	British North America, ...cwts ..	283, 428	368, 453	258, 354	464, 268	292, 856	548, 336
	Other...............cwts ..	160, 218	234, 973	162, 260	218, 567	182, 253	227, 172
	Total ....cwts ..	792, 203	1, 280, 510	815, 983	1, 494, 030	867, 928	1, 769, 521
	Foreign exports...cwts ..	196, 801	386, 482	219, 512	451, 334	226, 285	511, 737
	Net imports...cwts ..	585, 402	894, 028	596, 471	1, 042, 696	641, 643	1, 257, 784
	Total value of net imports of fish	....	1, 604, 563	....	1, 596, 088	....	1, 788, 046

DOMESTIC EXPORTS.

Fish, fresh or cured: Salmon	Total ....cwts..	7, 364	41, 136	6, 837	43, 176	8, 455	46, 770
Herrings	Germany ....bbls ..	928, 409	1, 152, 150	975, 188	1, 216, 496	722, 488	1, 106, 631
	Russia ....bbls ..	146, 484	184, 216	141, 128	175, 816	122, 515	177, 718
	Other ....bbls ..	164, 923	185, 525	216, 254	256, 907	114, 835	142, 291
	Total ....bbls ...	1, 239, 816	1, 521, 891	1, 332, 570	1, 649, 219	959, 838	1, 426, 640
Pilchards......	Italy (total)........hhds ..	15, 845	62, 604	13, 856	57, 930	9, 730	42, 159
All others	France	....	189, 781	....	151, 269	....	144, 680
	Other	....	200, 603	....	213, 702	....	221, 849
	Total	....	390. 334	....	364, 971	....	366, 529
	Total value of exports of fish	....	2, 015, 965	....	2, 115, 296	....	1, 882, 098

NOTE.—One hundred-weight equal to 112 pounds; one pound sterling equal to $4.8665.

No. 88.—STATEMENT showing the QUANTITY and VALUE of FISH IMPORTED into and EXPORTED from the UNITED KINGDOM for each Year from 1871 to 1885.

[From the "Statistical Abstract for the United Kingdom, 1885."]

YEARS.	FISH, IMPORTED.		EXPORTS.				
			FOREIGN.		DOMESTIC.		
			Fish, cured or salted.		Herring.		Other.
	Cwts.	£	*Cwts.*	£	*Barrels.*	£	£
1871	605, 330	711, 295	35, 349	111, 738	650, 954	888, 446	279, 962
1872	671, 192	859, 042	43, 956	172, 202	631, 750	891, 634	292, 167
1873	718, 174	1, 003, 236	58, 149	206, 132	723, 666	1, 026, 978	268, 918
1874	661, 406	981, 950	52, 075	173, 957	852, 630	1, 216, 782	224, 435
1875	840, 090	1, 266, 577	66, 048	191, 088	684, 755	956, 620	235, 801
1876	966, 119	1, 459, 974	62, 231	178, 335	426, 588	732, 737	220, 067
1877	1, 071, 802	1, 640, 259	78, 470	226, 056	649, 748	1, 056, 069	289, 534
1878	995, 933	1, 541, 830	88, 974	243, 148	664, 852	929, 114	351, 786
1879	1, 160, 140	1, 652, 957	141, 414	309, 264	637, 072	1, 062, 718	354, 437
1880	1, 343, 434	1, 666, 710	154, 193	306, 235	1, 072, 397	1, 422, 301	356, 900
1881	1, 530, 210	2, 332, 605	223, 702	491, 713	805, 170	1, 228, 037	398, 048
1882	1, 239, 217	2, 079, 181	225, 370	483, 988	918, 910	1, 374, 592	442, 110
1883	1, 295, 754	2, 301, 966	226, 285	511, 737	959, 838	1, 426, 640	455, 458
1884	1, 336, 422	2, 048, 800	219, 512	451, 334	1, 332, 570	1, 649, 219	466, 077
1885	1, 520, 570	1, 994, 614	196, 801	386, 482	1, 230, 816	1, 521, 891	494, 074

NOTE.—One pound sterling equals $4.8665.

No. 89.—The TARIFFS of the UNITED STATES, the DOMINION OF CANADA, and various Countries of EUROPE now in force, so far as they relate to importations of FISH.

UNITED STATES.

Dutiable.

Mackerel, one cent per pound.

Herrings, pickled or salted, one-half of one cent per pound.

Salmon, pickled, one cent per pound; other fish, pickled, in barrels, one cent per pound.

Foreign-caught fish, imported otherwise than in barrels or half barrels, whether fresh, smoked, dried, salted, or pickled, not specially enumerated or provided for in this act, fifty cents per hundred pounds.

Anchovies and sardines, packed in oil or otherwise, in tin boxes measuring not more than five inches long, four inches wide, and three and one-half inches deep, ten cents per whole box; in half boxes, measuring not more than five inches long, four inches wide, and one and five-eighths deep, five cents each; in quarter boxes measuring not more than four inches and three-quarters long, three and one-half inches wide, and one and a quarter deep, two and one-half cents each; when imported in any other form, forty per centum ad valorem.

Fish preserved in oil, except anchovies and sardines, thirty per centum ad valorem.

Salmon, and all other fish, prepared or preserved, and prepared meats of all kinds, not specially enumerated or provided for in this act, twenty-five per centum ad valorem.

No. 89.—TARIFFS of different Countries on IMPORTATIONS of FISH—Continued.

UNITED STATES—Continued.

Free of duty.

Fish, fresh, for daily consumption.

Fish skins.

Fish for bait.

Fishery products taken by American vessels and fishermen. (These products are not included in the statistics of imports of fish.)

Shrimps or other shell-fish. (This has been construed by decision of the Treasury Department to include all shell-fish, whether fresh or preserved.)

DOMINION OF CANADA.

Fish.	Tariff rates of duty.
Mackerel	1 cent per pound.
Herrings, pickled or salted	½ cent per pound.
Salmon, pickled	1 cent per pound.
All other fish, pickled in barrels	Do.
Foreign-caught fish imported otherwise than in barrels or half barrels, whether fresh, dried, salted, or pickled, not specially enumerated or provided for in this act	50 cents per 100 pounds.
Smoked and boneless fish	1 cent per pound.
Anchovies and sardines:	
Packed in oil, otherwise in tin boxes measuring not more than 5 inches long, 4 inches wide, and 3½ inches deep	5 cents per box.
In half boxes, measuring not more than 5 inches long, 4 inches wide, and 1⅝ deep	2½ cents per box.
Quarter boxes, measuring not more than 4¾ inches long, 3½ inches wide, and 1¼ deep	2 cents per box.
When imported in any other form	30 per cent.
Fish, preserved in oil, except anchovies and sardines	Do.
Salmon and all other fish prepared or preserved, including oysters, not specially enumerated or provided for	25 per cent.
Oysters:	
Shelled, in bulk	10 cents per gallon.
In cans, not over 1 pint	3 cents per can.
In cans over 1 pint and not over one quart, including cans	5 cents per can.
In cans exceeding 1 quart in capacity, an additional specific duty of 5 cents for each quart or fraction of a quart of capacity, including cans	5 cents per quart.
In the shell	25 per cent.
Fish, bait	Free.
The following articles, when the the natural products or the manufactures of the colony of Newfoundland, viz: Fish, fresh, dried, salted, or smoked, fish oil, and all products of fish	Free.

No. 89.—TARIFFS of different countries on IMPORTATIONS OF FISH—Continued.

COUNTRIES IN EUROPE.

DENMARK.

Fish.	Tariff rates of duty.		Equivalent in United States money.	
	Unit.	Duty.	Unit.	Duty.
		Kronen.		*Dollars.*
Alive and uncured	....	Free.	....	....
Dried or salted, &c	100 lbs	6.25	Cwt	1.7001

FRANCE.

		Francs.		*Dollars.*
Fresh ... Gross	100 kilos	5.00	100 lbs	44
Codfish (including stockfish and klepfish), dried, salted, or smoked ... Net	....do	48.00	....do	4 20
Other, dried, salted, or smoked ... Gross	....do	10.00	....do	88
Preserved in oil, pickled, or otherwise prepared ... Gross	....do	10.00	....do	88
Oysters:				
Fresh, young, for propagation	....	Free	....	....
Fresh, other ... Gross	1,000	1.50	1,000	29
Pickled ... Gross	100 kilos	10.00	100 lbs	88
Lobsters:				
Fresh ... Gross	....do	5.00	....do	44
Preserved or prepared ... Gross	....do	10.00	....do	88
Shell-fish	....	Free	....	....
Parings, cod, and mackerel ... Gross	100 kilos	60	....do	05

GERMANY.

		Marks.		*Dollars.*
Fresh	....	Free	....	....
Salted (except herrings), imported in barrels, dried, smoked, roasted, merely boiled	100 kilos	3.00	....	$71\frac{4}{10}$
Pickled, in barrels	....do	12.00	....	2 85
Prepared, others, fish of all kinds imported in vessels hermetically closed	....do	60.00	....	14 28
Herrings, salted	Cask	3.00	....	$71\frac{4}{10}$

ITALY.

		Francs.		*Dollars.*
Fresh	....	Free	....	....
Dried or smoked	100 kilos	5.00	....	96½
Preserved in salt	....do	6.00	....	1 15½
Preserved in oil	....do	10.00	....	1 93
Preserved in boxes	....do	10.00	....	1 93
(Sardines, anchovies, and the like, preserved in salt, are admitted free when imported from the most favored nations.)				

NETHERLANDS.

		Guilders.		*Dollars.*
Fish	....	Free	....	....
Canned	100 kilos	25.00	....	10 00

No. 89.—TARIFFS of different countries on IMPORTATIONS of FISH—Continued.

COUNTRIES IN EUROPE—Continued.

PORTUGAL.

Fish.	Tariff rates of duty.		Equivalent in United States money.	
	Unit.	Duty.	Unit.	Duty.
		Reis.		*Dollars.*
Fish, 6 per cent. ad valorem.				
Sea or fresh water, 6 per cent. ad valorem.				
Fresh-water fish, preserved in any way	Kilo	35		4
Salt-water fish, preserved in any way	....do	4½		00⅗
Prepared fish, not specified	....do	83⅓		3⅗
Fish in oil, including tare	....do	70		7⅗
Shell-fish, fresh or preserved	....do	2½		3/10

RUSSIA.

		Rubles.		*Dollars.*
Fresh	1 pood	.12	36 lbs	06
Dried	....do	.22	....do	11
Smoked and salted, except herrings	....do	1.20	....do	60
In oil and the like	....do	4.80	....do	2 40
Herring, smoked or salted	....do	.22	....do	11

SPAIN.

		Pesetas.		*Dollars.*
Fresh fish	Kilo	1.50		.2895
Fish in tins	Kilogram	1.00		.0193
Fish, salted, smoked, or pickled	100 kilos	12.00		2.3160
Codfish, stockfish, dried and salt	....do	23.50		4.5355
Shell-fish	....do	3.00		.5790

SWEDEN.

		Crowns.		*Dollars.*
Anchovies and sardels in oil or brine in hermetic boxes (weight of boxes included).	100 kilos	20.00		2 72
Other kinds of conserves (weight of boxes included)	....do	30.00		4 08
All other kinds of fish, fresh, dry, or salted	....do	Free		

UNITED KINGDOM.

Fish	Free of duty.

COMMERCE BETWEEN THE UNITED STATES AND BRITISH NORTH AMERICAN POSSESSIONS.

No. 90.—STATEMENT showing the QUANTITIES and VALUES of MERCHANDISE IMPORTED into the UNITED STATES from the DOMINION OF CANADA during the Year ending June 30, 1886.

ARTICLES.		Quantities.	Values.
Free of duty.			
ANIMALS, not elsewhere specified:			*Dollars.*
Cattle	No..	2,581	339,632
Horses	No..	5,288	1,186,917
Sheep	No..	1,380	23,696
All other, including fowls			127,706
Total			1,677,951
Articles, the growth, produce, or manufacture of the United States, returned.			1,990,531
Art-works, not elsewhere specified: Paintings, statuary, fountains, and other works of art, the production of American artists			2,964
Bark, hemlock	cords..	55,930	259,479
Books and other printed matter, not elsewhere specified			11,498
CHEMICALS, DRUGS, AND DYES, not elsewhere specified:			
Argal, or argol, or crude tartar, and argol dust	lbs..	3,289	168
Cochineal	lbs..	97	29
Logwood	tons..	1	34
Camphor, crude	lbs..	4,473	854
Indigo	lbs..	1,888	1,518
Mineral waters, all not artificial	galls..	3,786	385
Quinia, sulphate of, salts of, and cinchonidia	oz..	200	130
Sulphur or brimstone, crude	tons..		9
All other			73,114
Total			76,241
Coffee	lbs..	249,104	23,272
Cotton, unmanufactured	lbs..	2,350	306
Eggs	doz..	14,465,764	1,893,672
Farinaceous substances, and preparations of, not elsewhere specified			167
FERTILIZERS:			
Guano	tons..		3
Phosphates, crude or native, for fertilizing purposes	tons..	676	6,740
All other			82,215
Total			88,958
FISH, not elsewhere specified:			
Fresh, salmon	lbs..	1,422,620	144,779
Other	lbs..	18,866,687	519,961
Lobsters, canned or preserved			338,982
All other			61,694
Total			1,065,416
FRUITS, INCLUDING NUTS, not elsewhere specified:			
Bananas			20
All other			122,838
Total			122,858
Furs, and fur skins, undressed			696,343
Hair, not elsewhere specified			17,113
Hides and skins, other than fur-skins			495,970
Household and personal effects, and wearing-apparel in use, and implements, instruments, and tools of trade of persons arriving from foreign countries, and of citizens of the United States dying abroad			1,577,443
Oils, not elsewhere specified, volatile or essential	lbs..	558	566
PAPER-STOCK, CRUDE:			
Rags, other than woolen	lbs..	494,683	14,593
All other			94,645
Total			109,238
Plaster of Paris, or sulphate of lime, unground	tons..	111,891	115,003

No. 90.—MERCHANDISE IMPORTED from the DOMINION of CANADA, &c., 1886—Continued.

ARTICLES.		Quantities.	Values.
Free of duty—Continued.			*Dollars.*
Plumbago	cwts.	6,403	2,406
Seeds, not medicinal, not elsewhere specified			12,844
Silk, unmanufactured: Waste	lbs.	1,123	822
SPICES, UNGROUND:			
Pepper	lbs.	1,465	338
All other	lbs.	740	35
Total	lbs.	2,205	373
Tea	lbs.	138,157	21,072
Tin, bars, blocks, or pigs, grain or granulated	lbs.	70	7
Wood, unmanufactured, not elsewhere specified			1,362,237
All other free articles			380,784
TOTAL FREE OF DUTY			12,005,533
Dutiable.			
ANIMALS, not elsewhere specified:			
Cattle	No.	33,165	448,430
Horses	No.	15,854	1,762,858
Sheep	No.	363,862	943,514
All other			8,938
Total			3,163,740
Art-works, not elsewhere specified: Paintings, in oil or water colors, and statuary			1,804
Books, maps, engravings, etchings, and other printed matter, not elsewhere specified			34,942
Brass, and manufactures of			1,368
BREADSTUFFS:			
Barley	bush.	10,194,107	7,175,397
Corn	bush.	204	95
Oats	bush.	90,124	30,441
Oatmeal	lbs.	33,390	780
Rye	bush.	173,787	128,175
Wheat	bush.	379,569	328,500
Wheat-flour	bbls.	1,004	5,912
All other breadstuffs, and preparations of, used as food, not elsewhere specified			113,751
Total			7,783,051
Bristles	lbs.	50	94
Brushes			238
Buttons, except of brass, gilt, or silk, and button-molds, and button materials made in patterns or cut for buttons exclusively			49,168
Cement	bbls.	18	62
CHEMICALS, DRUGS, DYES, AND MEDICINES, not elsewhere specified:			
Coal-tar colors and dyes			898
Glycerine	lbs.	500	86
Potash, nitrate of, or saltpeter, crude	lbs.	31,373	1,034
Soda—			
Bicarbonate of	lbs.	171,949	2,275
Carbonate, including sal-soda and soda-ash	lbs.	336,734	4,203
Caustic	lbs.	83,389	1,673
All other salts of	lbs.	37,194	431
Total	lbs.	629,266	8,582
Sumac, ground	lbs.	22,400	850
All other			26,368
Total chemicals, drugs, &c			37,818
Clays or earths of all kinds, including china-clay, or kaoline	tons.	5	40
Clocks and watches, and parts of:			
Clocks, and parts of			435
Watches, and parts of, and watch materials and movements			9,626
Total			10,061
Coal, bituminous	tons.	312,498	1,014,116

No. 90.—MERCHANDISE IMPORTED from the DOMINION of CANADA, &c., 1886—Continued.

ARTICLES.	Quantities.	Values.
Dutiable—Continued.		
COPPER, AND MANUFACTURES OF:		*Dollars.*
Ore (fine copper contained therein) ... lbs..	3, 319, 333	332, 240
Pigs, bars, ingots, old, and other manufactured ... lbs..	1, 735	58
All other manufactures of ...	...	250
Total copper, &c., not including copper ore ...	...	308
COTTON, MANUFACTURES OF:		
Cloths—		
Not bleached, dyed, colored, stained, painted, or printed .. sq. yards..	232	22
Bleached, dyed, colored, stained, painted or printed ... sq. yards..	1, 620, 631	160, 250
Total ... sq. yards..	1, 620, 863	160, 272
Clothing, ready-made, and other wearing-apparel, not including knit goods ...	...	891
Embroideries, laces, insertings, trimmings, and lace window-curtains ...	...	379
Knit goods: Stockings, hose, half-hose, shirts, drawers, and all goods made, fashioned, or shaped on knitting-machines, or frames, or knit by hand ..	...	8
Thread (not on spools), yarn, warps, or warp-yarn ... lbs..	1, 601	395
All other ...	...	3, 219
Total cotton, manufactures of ...	...	165, 164
EARTHEN, STONE, AND CHINA WARE:		
China, porcelain, parian, and bisque, earthen, stone, and crockery ware—		
Not decorated or ornamented ...	...	352
Decorated or ornamented ...	...	572
All other ...	...	7, 381
Total ...	...	8, 305
FANCY ARTICLES:		
Beads (except amber) and bead ornaments ...	...	115
Dolls and other toys ...	...	550
Fans, except palm-leaf ...	...	314
Feathers, ornamental, natural ...	...	52
Feathers and flowers, artificial ...	...	2
Perfumeries, cosmetics, and all toilet preparations ...	...	1, 627
Pipes of all kinds, and smokers' articles ...	...	35
All other ...	...	2, 590
Total ...	...	5. 285
FISH, not elsewhere specified:		
Anchovies and sardines, packed in oil or otherwise ...	...	1, 105
Cod, haddock, hake, and pollock, dried, smoked, or pickled ... lbs..	11, 726, 134	263, 357
Herring—		
Dried or smoked ... lbs..	4, 626, 098	75, 723
Pickled or salted ... bbls..	38, 439	117, 195
Mackerel, pickled ... bbls..	50, 840	307, 520
Salmon, pickled ... bbls..	3, 320	37, 406
All other ...	...	155, 225
Total ...	...	957, 540
FLAX, HEMP, JUTE, AND OTHER VEGETABLE SUBSTANCES, AND MANUFACTURES OF:		
Unmanufactured—		
Flax ... tons..	1, 254	215, 714
Hemp, and all substitutes for hemp ... tons..	1	157
Total ... tons..	1, 255	215, 871
Manufactures of flax, hemp, or jute, or of which flax, hemp, or jute shall be the component material of chief value—		
Bags and bagging, and like manufactures ...	...	109
Brown or bleached linens, ducks, canvas, paddings, cot-bottoms, diapers, crash, huckabacks, handkerchiefs, and lawns ...	...	280
Cables and cordage ... lbs..	8, 179	193
Thread, twine, and pack-thread ...	...	134
All other ...	...	3, 300
Total ...	...	4, 016
FRUITS, INCLUDING NUTS, not elsewhere specified:		
Lemons ...	...	34
Oranges ...	...	49
Raisins ... lbs..	104, 210	7, 423
Preserved fruits ...	...	4, 621

No. 90.—MERCHANDISE IMPORTED from the DOMINION of CANADA, &c., 1886—Continued.

ARTICLES.	Quantities.	Values.
Dutiable—Continued.		*Dollars.*
All other fruits		5,978
Nuts—		
Almonds ... lbs.	16	3
All other		447
Total		18,555
Furs, dressed on the skin, and manufactures of fur		10,309
GLASS AND GLASSWARE:		
Bottles, vials, demijohns, carboys, and jars, empty, or filled		1,024
Cylinder, crown, and common window glass, unpolished ... lbs.	1,499	101
Plate glass—		
Unsilvered ... sq. feet.	458	540
Silvered ... sq. feet.	28	2
All other		1,671
Total		3,838
Hair, not elsewhere specified, and manufactures of		27
Hats, bonnets, and hoods, and materials for		4,524
Hay ... tons.	91,951	1,034,496
Hops ... lbs.	546	124
India-rubber and gutta-percha, manufactures of		2,476
IRON AND STEEL AND MANUFACTURES OF:		
Ore, iron ... tons.	8,104	25,731
Pig-iron ... tons.	7	103
Scrap, fit only to be remanufactured—		
Iron, wrought and cast ... tons.	1,670	25,467
Steel ... tons.	915	14,279
Bar-iron, rolled or hammered ... lbs.	4,324	131
Bars, railway—		
Of iron ... tons.	26	165
Ingots, blooms, slabs, billets, and bars of steel, and steel in forms not elsewhere specified ... lbs.	19,492	1,253
Sheet, plate, and taggers' iron ... lbs.	12,127	301
Tin-plates, terne-plates, or taggers' tin ... lbs.	1,802,756	63,083
Wire rods (rivet, screw, nail, and fence), round, in coils and loops, of iron or steel ... lbs.	16,800	75
Wire, and wire rope and strand, iron or steel ... lbs.	23,771	2,062
Manufactures of, not elsewhere specified:		
Anvils, axles, and forgings, of iron or steel ... lbs.	2,100	137
Chains, of iron or steel ... lbs.	3,730	191
Cutlery		349
Files, file-blanks, rasps, and floats		2
Fire-arms		1,393
Machinery		31,617
Needles		563
All other		53,960
Total iron and steel, &c., not including iron ore		195,056
JEWELRY, MANUFACTURES OF GOLD AND SILVER, AND PRECIOUS STONES:		
Jewelry, and manufactures of gold and silver		2,629
Precious stones, not elsewhere specified, and imitations of, not set		65,647
Lead, and manufactures of		105
LEATHER, AND MANUFACTURES OF:		
Leather—		
Bend, belting, and all sole-leather		1,711
Calf-skins, tanned or tanned and dressed		748
Upper-leather of all other kinds, dressed, and skins, dressed and finished		31,622
Total		34,081
Manufactures of—		
Gloves, kid and leather		111
All other		11,640
Total		11,751
Malt, barley ... bush.	319,005	233,751
MALT-LIQUORS:		
In bottles or jugs ... galls.	3,051	3,343
Not in bottles or jugs ... galls.	4,542	1,953
Total ... galls.	7,593	5,296

No. 90.—MERCHANDISE IMPORTED from the DOMINION of CANADA, &c. 1886 nued.

Articles.	Quantities.	Values.
Dutiable—Continued.		*Dollars.*
MARBLE AND STONE, AND MANUFACTURES OF:		
Marble and manufactures of, not elsewhere specified	....	111
Stone and manufactures of, including slate	....	92, 756
Total	....	92, 867
METALS, METAL COMPOSITIONS, AND MANUFACTURES OF, not elsewhere specified:		
Bronze manufactures	....	37
All other	....	13, 779
Total	....	13, 816
Mineral substances, not elsewhere specified	....	3, 646
Musical instruments, and parts of	....	17, 860
OILS, not elsewhere specified:		
Animal—		
Whale and fish ... galls..	65, 046	18, 024
Other ... galls..	8, 476	1, 382
Mineral ... galls..	370, 302	15, 204
Vegetable—		
Fixed or expressed ... galls..	667	319
Volatile or essential ... lbs..	....	1
Total	....	34, 930
Paints and colors	....	1, 051
Paper, and manufactures of	....	6, 828
PROVISIONS, comprising meat and dairy products:		
Meat products—		
Meats, prepared, of all kinds, and meat extracts	....	492
All other	....	133, 213
Dairy products—		
Butter ... lbs..	176, 038	27, 748
Cheese ... lbs..	3, 541	383
Milk, preserved or condensed	....	969
Total	....	162, 805
RICE, not elsewhere specified:		
Rice ... lbs..	246, 498	5, 080
Rice, granulated, or rice-meal ... lbs..	25, 200	504
Total ... lbs..	271, 698	5, 584
Salt ... lbs..	28, 939, 667	53, 317
SEEDS, NOT MEDICINAL, not elsewhere specified:		
Linseed, or flaxseed ... bush..	35	30
All other	....	2, 097
Total	....	2, 127
SILK, MANUFACTURES OF:		
Clothing, ready-made, and other wearing-apparel	....	195
Dress and piece goods	....	366
All other	....	2, 561
Total	....	3, 122
Soap	....	663
Spices, ground ... lbs..	120	16
SPIRITS, DISTILLED, AND SPIRITUOUS COMPOUNDS:		
Brandy ... proof galls..	7, 021	14, 660
All other ... proof galls..	17, 237	15, 956
Total ... proof galls..	24, 258	30, 616
SUGAR, MOLASSES, SUGAR CANDY, AND CONFECTIONERY:		
Molasses ... galls..	254, 468	52, 760
Sugar, Dutch standard in color—		
Not above No. 13, and tank bottoms, sirups, melada, &c ... lbs..	2, 455, 042	97, 855
Above No. 13, and not above No. 20 ... lbs..	34, 691	1, 025
All above No. 20 ... lbs..	217	20
Sugar candy and confectionery	....	306
Total	....	151, 966

No. 90.—MERCHANDISE IMPORTED from the DOMINION of CANADA, &c., 1886—Continued.

ARTICLES.	Quantities.	Values.
Dutiable—Continued.		
TOBACCO, AND MANUFACTURES OF:		
Leaf—		*Dollars.*
Suitable for wrappers..........lbs..	24,730	18,347
All other..........lbs..	396,689	170,930
Total..........lbs..	421,419	189,277
Manufactures of—		
Cigars, cigarettes, and cheroots..........lbs..	3,483	5,460
All other..........	....	23,390
Total..........	....	28,850
VEGETABLES:		
Beans and pease..........bush..	608,444	524,978
Potatoes..........bush..	1,441,504	369,965
Pickles and sauces..........	....	134
All other—		
In their natural state, or in salt or brine..........	....	48,252
Prepared or preserved..........	....	8,887
Total..........	....	952,216
WINES:		
Champagne, and other sparkling..........doz..	360	4,544
Still wines—		
In casks..........galls..	7,891	10,633
In bottles..........doz..	170	1,163
Total..........	....	16,839
WOOD, AND MANUFACTURES OF:		
Unmanufactured, not elsewhere specified..........	....	54,304
Timber, sawed and hewn..........	....	2,272
Lumber—		
Boards, planks, deals, and other sawed lumber..........M feet..	547,424	6,381,571
Shingles..........M..	79,150	171,597
Other lumber..........	....	757,208
Manufactures of—		
Cabinet-ware and house-furniture..........	....	53,420
All other..........	....	93,014
Total..........	....	7,513,386
WOOLS, HAIR OF THE ALPACA, GOAT, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:		
Unmanufactured—		
Clothing wools..........lbs..	1,254,624	267,054
Combing wools..........lbs..	312,436	64,634
Carpet and other similar wools..........lbs..	59,988	5,500
Total..........lbs..	1,627,048	337,188
Manufactures of—		
Carpets and carpeting of all kinds..........sq. yards..	1,354	963
Clothing, ready-made, and other wearing-apparel, except shawls and knit goods..........	....	4,774
Cloths..........lbs..	14,696	14,978
Dress-goods, women's and children's..........sq. yards..	593	264
Knit goods..........	....	2,299
Rags, shoddy, mungo, waste, and flocks..........lbs..	3,797	1,130
Shawls..........	....	186
Yarns..........lbs..	354	193
All other..........	....	8,159
Total..........	....	32,946
ZINC, SPELTER, OR TUTENEGUE, AND MANUFACTURES OF:		
In blocks or pigs, and old..........lbs..	61,590	917
Manufactures of..........	....	240
Total..........	....	1,157
All other dutiable articles..........	....	212,803
TOTAL VALUE OF DUTIABLE MERCHANDISE..........	....	25,309,103
TOTAL VALUE OF MERCHANDISE FREE OF DUTY..........	....	12,005,533
TOTAL VALUE OF IMPORTS OF MERCHANDISE..........	....	37,314,636

No. 91.—STATEMENT showing the QUANTITIES and VALUES of MERCHANDISE IMPORTED from the United States and entered for CONSUMPTION in the DOMINION of CANADA, with the amounts of DUTY COLLECTED on the same, during the Year ending June 30, 1886.

[From the tables of the "Trade and Navigation of the Dominion of Canada."]
Abbreviation: n. o. s., not elsewhere specified.

DUTIABLE.

ARTICLES.	Units of quantities.	Quantities.	Values.	Duty collected.
			Dollars.	*Dollars.*
Ale, beer, and porter	Gallons	125,648	30,458	13,207 40
Ale, ginger			182	36 40
ANIMALS, LIVING:				
Cattle	Number	1,858	61,009	12,201 90
Horses	do	2,232	112,446	22,519 30
Sheep	do	30,427	61,643	12,328 75
Swine	do	16,488	121,558	24,311 60
All other, n. o. s			12,977	2,600 90
Total			360,633	73,962 45
Bagatelle tables, cues, and balls	Number	4	115	39 65
Bags, containing fine salt	do	6,096	332	83 00
Baking powder			121,664	24,387 44
Belts and trusses			20,006	5,002 69
Bells, except for churches			6,881	2,064 30
Billiard tables	Number	20	2,902	965 30
Bird cages			3,560	1,068 00
Blacking			36,067	9,017 78
Black lead			8,800	1,761 00
Blueing (laundry)			1,033	258 25
Books, periodicals, and all printed matter			724,661	148,003 51
Bookbinders' tools			12,450	1,244 90
Boot, shoe, and stay laces			12,548	3,764 40
Braces and suspenders			32,195	9,657 95
Brass and manufactures of			240,122	68,457 01
BREADSTUFFS:				
Arrowroot and tapioca	Pounds	131,687	5,038	1,027 60
Bread and biscuit	do	487,638	22,793	4,559 10
Macaroni and other similar preparations	do	53,192	3,216	643 30
Rice	do	595,851	15,649	5,958 51
Rice and sago flour	do	1,895	125	37 90
Barley	Bushels	8,134	5,497	1,220 14
Beans and pease	do	10,734	13,722	1,409 29
Buckwheat	do	23	21	2 82
Corn	do	1,825,383	835,839	136,904 61
Oats	do	98,357	32,930	9,835 67
Rye	do	18	15	1 85
Wheat	do	66.061	55,770	9,909 72
Cornmeal	Barrels	123,779	298,038	49,583 82
Oatmeal	Pounds	183,946	5,909	919 69
Rye flour	Barrels	116	482	58 87
Wheat flour	do	199,375	777,848	99,678 00
All other breadstuffs			70,751	14,010 53
Total			2,143,652	335,760 92
BRICK AND TILES:				
Building brick	Thousands	813	4;158	831 75
All other			74,703	16,849 90
Total			78,861	17,681 65
Brooms of all kinds			1,323	330 75
Brushes of all kinds			38,649	9,664 00
Buttons			94,607	23,651 61
Candles of all kinds	Pounds	110,315	14,201	3,581 75
Cane or rattan, manufactured			8,174	2,051 81
Caplins, unfinished Leghorn hats			1,104	220 80
CARRIAGES, WAGONS, AND CARTS	Number	675	37,971	13,293 63
Sleighs and cutters	do	4,331	7,472	2,243 84
Wheelbarrows	do	4,003	12,220	3,666 10
Bicycles, tricycles, and velocipedes	do	60	482	144 60
Children's carriages	do	2,074	15,330	5,365 50
Carriages, all other	do	195	8,748	3,061 80
Carriages, parts of			68,046	23,687 71
Total			150,269	51,463 18

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

DUTIABLE—Continued.

ARTICLES.	Units of quantities.	Quantities.	Values.	Duty collected.
			Dollars.	*Dollars.*
Cars, railway, passenger and freight			215,485	64,645 50
Carpets	Yards	5,573	2,354	588 50
Cases, jewel and watch, and other fancy cases			14,653	4,395 90
Celluloid, molded into sizes for knife handles			26	2 60
Cement, hydraulic and other			15,519	4,504 88
Chalk			5,000	1,000 25
Chicory	Pounds	5,719	347	213 02
Cider, refined	Gallons	83,885	10,865	2,489 80
Clocks, and parts of			106,009	36,832 10
COAL:				
Anthracite	Tons	995,402	4,027,981	497,688 12
Bituminous	do	832,939	2,419,586	499,763 06
Dust	do	36,229	36,902	7,398 40
Total			6,484,550	1,004,849 58
Coke	Tons	10,416	35,491	5,209 57
Coal tar and coal pitch	Barrels	19,353	26,896	2,691 70
Cocoa matting			738	184 50
Cocoanuts	Number	408,185	13,065	4,081 85
Cocoanuts, desiccated	Pounds	38,834	6,661	2,526 60
Cocoa paste and chocolate	do	93,379	18,540	3,953 30
COFFEE:				
Green	do	920,610	96,204	9,620 45
Roasted	do	88,879	16,252	4,286 67
Roasted and ground, imitations of	do	6,380	615	191 40
Total			113,071	14,098 52
Collars, cuffs, shirt fronts of paper, linen or cotton			80,433	24,119 70
Combs			23,219	5,806 50
COPPER, AND MANUFACTURES OF:				
Pig, old, bars, rods, and ingots	Cwts	3,793	31,265	3,126 50
Tubing, seamless drawn	Feet	44,325	11,440	1,144 00
Other manufactures of			23,364	6,708 20
Total			66,069	10,978 70
Cordage, all kinds	Pounds	735,571	78,056	15,102 47
Corks, cork wood, and bark, manufactured			25,054	5,010 80
COTTON, MANUFACTURES OF:				
Sheeting, drills, and other cloths, bleached and unbleached.	Sq. yards	1,000,287	124,776	29,024 65
Ginghams, or plaids, dyed or colored	do	101,875	12,168	3,896 00
Denims, drills, and other cloths, colored	do	587,582	88,821	25,053 96
Printed or dyed fabrics	Yards	4,759,877	262,115	75,454 35
White cotton jeans and coutilles	do	478,490	42,078	8,415 60
Cotton for manufacturing enameled cloth	do	351,510	28,387	4,258 05
Damask, bleached and unbleached	do	5,480	1,060	272 00
Cords, braids, gimps, and trimmings			15,932	3,186 40
Handkerchiefs			162	40 50
Wadding and paddings	Pounds	345,044	45,419	15,725 24
Yarns, knitting and hosiery	do	40,039	9,283	2,428 24
Bags, seamless	do	50,048	11,064	2,848 84
Warp on beams	Yards	5,670	337	107 25
Shirts, drawers, hosiery, and knitted cloth			34,137	10,241 11
Thread			14,392	2,842 17
Comforters and quilts	Number	702	1,108	304 83
Clothing and other materials, n. e. s			178,515	58,568 30
Bags, made by hand			9,638	2,889 98
Netting for shoes, boots and gloves			2,152	215 20
Belting			70	17 50
Lampwicks			4,782	1,433 70
Parasols and umbrellas			3,366	1,009 89
Shawls			115	28 75
Towels			960	232 82
Velveteens and cotton velvets	Yards	10,911	2,901	580 20
Winceys	do	12,562	1,452	328 70
All other			142,129	28,131 00
Totals			1,037,809	272,523 65

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

DUTIABLE—Continued.

ARTICLES.	Units of quantities.	Quantities.	Values.	Duty collected.
			Dollars.	*Dollars.*
Crapes of all kinds			1,146	229 20
Crucibles	Number	41,288	3,672	752 10
Drugs, dyes, chemicals, and medicines:				
Acids—				
Acetic	Gallons	5,872	6,875	2,845 11
Sulphuric	Founds	506,904	7,874	2,534 55
Mixed	do	44,152	2,591	645 40
All other			11,522	2,304 00
Aniline dyes	Pounds	311	288	29 20
Collodion	do	7	7	1 40
Gelatine, and all similar preparations	do	3,480	2,453	400 60
Glue	do	437,773	48,335	9,667 05
Glycerine	do	43,488	5,758	1,151 60
Gums	do	45,133	18,420	3,684 04
Lime and lemon juice			595	119 00
Acetate of lime	Pounds	6,978	41	8 20
Acetate and nitrate of lead	do	7,405	422	21 10
Liquorice, paste, &c	do	63,706	11,807	2,611 69
Magnesia	do	353	65	13 00
Milk food			4,657	1,397 10
Morphine	Ounces	3	7	1 40
Opium for smoking	Pounds	14	243	70 00
Proprietary medicines			155,692	54,170 26
Saleratus	Pounds	9,094	792	158 40
Potash:				
Chlorate of	do	4,040	492	98 40
Nitrate of (saltpeter)	do	3,531	186	37 20
Prussiate of	do	740	354	35 40
Soda, bi-carbonate of	do	130,514	5,535	1,107 00
Sumac	do	13,591	647	129 40
Vaseline and similar petroleum preparations	do	38,633	4,781	1,558 98
Yeast-cakes	do	45,913	9,247	3,006 00
Zinc, chloride, salts, and sulphate of	do	7,215	308	15 40
All other			174,430	34,802 59
Total			501,167	122,713 47
Earthen and china ware			41,415	12,400 21
Electric and galvanic batteries			14,517	3,630 95
Electric-light apparatus			35,030	8,756 88
Embroideries, n. e. s			1,848	401 80
Emery-wheels			5,522	1,382 75
Essences, of apple, pine-apple, and other fruits	Gallons	344	2,774	1,210 13
Excelsior, for upholsterers's use			2,495	498 80
Fancy goods:				
Alabaster and spar ornaments			4,702	1,216 20
Beads and bead ornaments			5,868	1,560 60
Boxes and fancy cases, and writing-desks			1,921	563 05
Braids, cords, gimps, fringes, and bindings			14,102	4,138 22
Bone, shell, horn, and ivory ornaments			14,284	2,907 50
Fans, not printed			6,289	1,572 49
Flowers, artificial			14,863	3,716 20
Feathers			18,246	4,317 95
Gold and silver cloth, tassels, and thread			440	88 00
Dice, draughts and chessmen, of bone or ivory			1,276	255 20
Lace, lace-curtains, collars, and similar goods			57,424	12,977 40
Millinery			2,198	577 95
Toys			34,801	9,160 15
Jet manufactures			1,042	208 40
All other			13,808	3,025 63
Total			191,256	46,284 94
Felt, for roofing, and other			15,990	3,265 88
Fertilizers			1,849	369 80
Fireworks			9,212	2,303 00
Fish:				
Cod, haddock, ling, and pollock, salted or cured	Pounds	2,377,736	77,855	14,480 40
Halibut, salted or cured	do	72,125	2,679	362 72
Herring, salted or cured	do	67,284	2,858	567 42
Mackerel, fresh, salted, or cured	do	91,588	5,118	915 88
Sea fish, other, fresh, salted, or cured	do	26,177	1,565	187 18

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

DUTIABLE—Continued.

Articles.	Units of quantities.	Quantities.	Values.	Duty collected.
FISH—Continued.				
Oysters:			*Dollars.*	*Dollars.*
In shell	Barrels	1, 894	8, 169	2, 042 46
Shelled, in bulk	Gallons	207, 804	222, 629	20, 780 50
Canned			41, 815	9, 717 81
Lobsters			3, 125	651 99
Bait fish, fresh and salted	Pounds	8, 200	179	64 00
Salmon, fresh, salted, or cured	do	47, 003	2, 396	535 26
Smoked and boneless fish	do	334, 155	16, 360	3, 341 55
Anchovies and sardines			3, 711	1, 058 79
Fish preserved in oil			3, 323	813 37
All other, not in barrels			2, 709	507 85
Fresh, n. e. s			1, 029	205 80
Total			395, 520	56, 262 98
Fish oil	Gallons	26, 932	10, 553	2, 110 60
Packages containing oysters			17, 937	4, 493 47
FLAX, HEMP, AND JUTE, MANUFACTURES OF:				
Carpeting and mats			3, 361	840 25
Sail twine	Pounds	4, 752	999	49 95
Damask, bleached or unbleached	Yards	7, 424	1, 504	376 50
Fiber, scutched	Pounds	21, 195	2, 528	211 95
Tow	do	29, 759	642	148 84
Towels			960	240 00
Sheeting	Yards	570	58	11 60
Linens, brown or bleached	do	15, 270	2, 389	477 80
Duck, canvas, and like cloth			14, 856	2, 971 10
Clothing			988	296 40
Thread	Pounds	1, 681	980	196 00
Yarn, jute			375	75 00
All other			30, 160	6, 032 00
Total			59, 800	11, 927 39
FRUITS AND NUTS:				
Apples, dried	Pounds	239, 562	12, 907	4, 788 74
Currants, dried	do	300, 404	12, 724	2, 484 72
Dates	do	294, 449	8, 800	1, 698 04
Figs	do	19, 034	1, 954	376 64
Prunes and plums	do	238, 494	9, 256	2, 104 47
Raisins	do	1, 118, 742	43, 437	8, 654 13
All other dried fruits			11, 471	2, 002 04
Almonds:				
Shelled	do	14, 902	2, 271	587 70
Not shelled	do	112, 509	10, 475	2, 299 20
Filberts and walnuts	do	258, 027	15, 625	8, 597 71
All other nuts, n. e. s			61, 950	16, 754 48
Apples, green	Barrels	31, 278	63, 366	12, 511 90
Blackberries, raspberries, and strawberries	Pounds	231, 378	23, 557	8, 473 59
Cherries and currants	Quarts	51, 085	4, 914	510 85
Cranberries, plums, and quinces	Bushel	17, 170	34, 650	5, 150 96
Grapes	Pounds	389, 868	27, 340	7, 797 39
Peaches	do	592, 880	42, 571	5, 928 80
Oranges and lemons			196, 656	30, 330 95
All other green fruits			108, 645	21, 734 72
Canned fruits	Pounds	591, 765	34, 578	19, 199 01
Preserved fruits			2, 325	1, 169 56
Total			728, 972	167, 155 50
Furs and manufactures of			129, 181	21, 572 35
GLASS, AND MANUFACTURES OF:				
Carboys, bottles, decanters, and similar articles			256, 019	76, 829 70
Lamp shades			143, 096	42, 928 39
Ornamental, figured	Sq. feet	504	356	106 80
Stained or tinted	do	12, 213	3, 009	1, 172 70
Window, common	do	64, 685	5, 348	1, 604 40
Colored glass	do	2, 505	572	121 90
Plate, not colored	do	4, 003	3, 483	264 22
Silvered	do	19, 583	5, 363	1, 608 90
All other			20, 664	4, 136 80
Total			438, 810	128, 773 81

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

DUTIABLE—Continued.

ARTICLES.	Units of quantities.	Quantities.	Values.	Duty collected.
			Dollars.	*Dollars.*
Gloves and mitts, except of leather			4,841	1,246 50
Gold and silver manufactures			154,778	44,415 47
Grease, axle, and other	Pounds	196,983	7,906	1,969 83
Gunpowder and other explosives	do	204,061	28,261	11,993 72
Cartridges and cartridge cases			48,375	14,512 38
GUTTA-PERCHA AND INDIA-RUBBER, MANUFACTURES OF:				
Boots and shoes			189,508	47,407 26
Belting			87,445	9,615 50
Clothing			85,829	29,865 50
Hose			80,423	7,941 02
All other			155,755	38,988 08
Total			498,450	133,817 86
Hair and manufactures of			22,963	4,616 90
HATS, CAPS, AND BONNETS:				
Silk or felt			342,485	85,620 75
Straw, grass, &c			215,807	53,954 70
All other			36,249	9,062 31
Total			594,541	148,637 76
Hay	Tons	814	6,097	1,339 60
Honey	Pounds	17,128	1,905	513 84
Hops	do	164,369	23,550	9,862 16
Ink			55,026	11,687 15
IRON AND STEEL, AND MANUFACTURES OF:				
Agricultural implements:				
Drills	Number	312	3,538	1,238 30
Fanning-mills	do	147	1,698	594 30
Forks	do	32,916	8,215	2,874 84
Harrows	do	190	3,108	1,099 41
Harvesters and reapers	do	135	23,192	8,117 20
Hoes	do	5,586	2,050	717 10
Mowing-machines	do	162	4,710	1,648 50
Plows	do	442	6,940	2,423 00
Rakes, horse and hand	do	12,825	2,546	887 90
Scythes	do	3,219	15,448	5,657 85
Spades and shovels	do	85,320	16,758	5,865 45
All other agricultural implements			46,514	16,408 56
Anvils	Cwts	28	241	72 30
Axles	do	732	1,658	414 50
Band and hoop iron	do	3,764	11,318	1,490 03
Bars	do	12,500	28,097	4,911 91
Boiler plate	do	8,271	20,607	2,576 25
Bolts, nuts, and rivets			39,192	12,500 07
Bedsteads			2,434	851 91
Canada plate	Cwts	398	678	109 75
Car wheels	do	2,138	5,734	1,433 38
Castings, n. e. s			220,759	55,431 85
Cast-iron pipe			17,076	4,552 70
Chains and cables	Cwts	2,173	6,325	853 55
Engines and boilers			208,885	52,915 25
Fire extinguishers	Number	28	1,799	449 75
Hardware, builders' and cabinet-makers'			491,272	147,409 38
Hardware, carriage			1,902	665 70
Hardware, house-furnishing			124,637	37,438 75
Hardware, all other			3,401	782 10
Hollow-ware			85,399	21,852 25
Horseshoes and horseshoe nails			3,888	1,248 90
Iron bridge and structural iron work	Cwts	2,043	8,916	2,229 00
Locks of all kinds			67,022	20,107 10
Machinery			879,456	221,024 80
Sewing-machines	Number	6,730	145,393	42,562 70
Malleable castings			19,841	4,960 65
Nail and spike rods	Cwts	188	702	122 85
Nails and spikes	Pounds	492,841	21,527	5,782 95
Ornamental iron work			1,367	341 59
Pig iron:				
Charcoal	Tons	3,185	60,086	6,369 81
All other	do	6,871	139,364	13,744 88
Pumps			15,750	5,412 67

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

DUTIABLE—Continued.

ARTICLES.	Units of quantities.	Quantities.	Values.	Duty collected.
IRON AND STEEL, &c.—Continued:			*Dollars.*	*Dollars.*
Railway bars	Cwts	689	4,104	615 60
Railway fish plates	....do	583	1,887	331 23
Rolled beams and T-irons	....do	9,691	21,487	2,658 09
Safes, and doors for safes and vaults			9,346	2,261 50
Screws (wood-screws)			3,280	1,147 47
Scales and balances			25,247	7,577 15
Sheet-iron	Cwts	5,661	20,248	2,765 44
Skates	Pairs	4,706	14,824	4,447 60
Stoves	Number	1,923	22,522	5,631 60
Tacks, brads, and sprigs			5,061	1,518 30
Tubing, wrought and boiler tubing	Feet	920,189	94,393	19,934 03
Wire	Pounds	282,600	48,181	10,404 61
Wire rope, strand or chain	Cwts	1,813	10,291	2,574 07
Wire work, all other			75,871	19,008 57
All other manufactures of iron			21,000	4,182 76
Steel, manufactures of:				
Knives and all other cutlery			44,834	11,211 87
Coil and other springs			13,700	4,109 65
Files and rasps			30,233	10,580 40
Locomotive tires	Cwts	877	2,217	221 70
Firearms			56,262	11,254 30
Needles, sewing and knitting			16,500	3,484 20
Surgical instruments			3,550	713 70
Ingots, bar and sheets	Cwts	24,988	96,154	13,242 90
Tools, edge and mechanics'			156,860	47,069 33
Saws			59,994	17,986 93
All manufactures of iron and steel n. e. s			47,096	9,426 85
Total			3,673,821	928,151 56
Ivory, manufactures of, n. e. s			880	176 00
Jewelry, of gold and silver			313,843	62,759 39
Lead, and manufactures of			14,378	3,222 33
LEATHER AND MANUFACTURES OF:				
Sole leather:				
Tanned, but rough or undressed	Pounds	123,802	25,903	2,599 30
Tanned, but not waxed or glazed	....do	674,087	166,828	25,033 76
Tanned, waxed or glazed	....do	5,286	2,670	535 90
Upper leather:				
Tanned, but not waxed or glazed	....do	26,266	8,542	1,282 38
Tanned calf, kid, lamb, and sheep skin not waxed or glazed.	....do	40,547	20,542	3,081 30
Tanned calf, waxed or glazed	....do	97,154	94,674	18,934 80
Cordova leather	....do	581	431	107 75
Glove leathers, tanned or dressed, colored or not colored.	....do	79,691	55,597	5,559 74
Upper-leather, dressed, and waxed or glazed	....do	7,741	4,754	950 80
Japanned, patent, or enameled leather	....do	31,888	14,405	2,892 80
Morocco skins, tanned, but rough or undressed	....do	13,067	7,675	767 50
All other leather and skins, tanned not elsewhere specified.	....do	168,859	112,021	22,408 53
Boots and shoes	Pairs	171,372	104,900	41,256 08
Harness and saddlery, and parts of			27,885	7,440 85
Gloves and mitts of kid and leather			32,373	8,270 21
Leather belting			32,253	8,066 15
Manufactures of, all other, not elsewhere specified.			71,596	17,904 05
Total			843,268	167,091 90
Lime	Barrels	11,021	9,347	1,869 49
Lithographic stones, not engraved			2,483	496 60
Machine card clothing			4,668	1,169 00
Magic lanterns	Number	109	1,620	404 88
Malt	Bushels	19,914	17,456	2,987 19
Malt, extract of			2,806	701 50
MARBLE, AND MANUFACTURES OF:				
Blocks from the quarry, in the rough or sawn on two sides only and not shapen.			4,687	468 70
Slabs, sawn on not more than two sides			27,043	2,704 30
Slabs, sawn on more than two sides			45,643	9,132 72
Manufactures of, not elsewhere specified			20,191	6,063 65
Total			97,564	18,369 37

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

DUITABLE—Continued.

ARTICLES.	Units of quantities.	Quantities.	Values.	Duty collected.
			Dollars.	*Dollars.*
Mats and rugs			15,546	3,886 40
METAL AND MANUFACTURES OF:				
Babbitt metal			4,293	429 30
Britannia metal, manufactures of, not plated			60,997	15,249 25
Bronze or Dutch metal			1,928	385 60
Phosphor-bronze			249	24 90
Gas, coal-oil, and kerosene fixtures, and parts thereof			47,185	14,155 45
German and nickel silver:				
Not plated			14,235	3,558 75
In sheets			45	4 50
Japanned and stamped wares, not otherwise provided for.			21,098	5,274 50
Nickel anodes			2,170	217 00
Pins			9,789	2,936 65
Screws of iron, steel, brass, or other metal			9,235	2,769 07
Stereotypes and electrotypes of standard books			5,660	506 90
Stereotypes for blanks and advertisements			11,973	2,301 45
Stereotypes of type-metal	Pounds	4,421	1,139	221 09
Umbrella and parasol ribs, of steel, iron, or brass			10	2 00
Type for printing			27,398	5,479 60
Type metal			451	45 40
Pewter, platina, and metal compositions, not elsewhere specified			3,501	714 50
Total			221,425	54,428 91
MINERAL SUBSTANCES, not elsewhere specified:				
Asbestos, and manufactures of			6,283	1,579 05
Meerschaum, manufactures of			201	40 20
Mineral and bituminous substances			18,219	3,644 10
Plumbago			4,338	433 80
Plumbago, manufactures of			1,325	265 00
Total			30,366	5,963 05
Mineral and aerated waters, not elsewhere specified			2,402	480 40
MUSICAL INSTRUMENTS:				
Organs, reed:				
Having not over two sets of reeds	Number	284	14,513	5,017 05
Having not over four sets of reeds	do	74	5,850	1,987 50
Having not over six sets of reeds	do	6	567	205 02
Having over six sets of reeds	do	1	340	81 00
Reeds sets, or part of sets of, for cabinet organs			8,614	2,153 50
Pipe organs			4,305	1,076 25
Piano-fortes:				
Square, not over seven octaves	do	54	8,802	2,670 30
All other	do	286	60,039	17,585 85
Upright	do	640	148,928	41,534 12
Concert or parlor grand	do	29	15,220	3,733 00
Parts of			42,281	10,570 25
Musical instruments, all other, not elsewhere specified			28,501	7,125 25
Total			337,960	93,739 09
Mustard cake	Pounds	27,072	1,910	382 00
MUSTARD SEED:				
Unground	do	11,118	746	102 65
Ground	do	137,012	10,687	2,666 75
OILS, MINERALS.				
Coal and kerosene	Gallons	3,818,798	421,810	274,952 92
Products of petroleum	do	407,189	59,591	29,318 56
Carbolic or heavy	do	11,474	625	62 50
Total			482,026	304,333 98
OILS, ANIMAL:				
Cod liver, refined	Gallons	1,022	891	178 20
Lard oil	do	21,497	11,293	2,259 25
Neat's-foot	do	3,462	2,416	483 20
Other animal oils, not elsewhere specified	do	9,930	4,052	810 90
Total			18,652	3,731 55

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

DUTIABLE—Continued.

ARTICLES.	Units of quantities.	Quantities.	Value.	Duty collected.
			Dollars.	*Dollars.*
OILS, VEGETABLE:				
Castor	Gallons	567	520	104 40
Flax-seed	do	22,506	9,058	2,264 50
Olive or salad	do	32,160	16,330	3,266 30
Sesame	do	1	1	20
Vegetable, not elsewhere specified	do	23,357	7,259	1,451 80
Total			33,168	7,087 20
OILS, LUBRICATING:				
Composed wholly or in part of petroleum, costing 30 cents or over per imperial gallon	Gallons	113,781	57,142	14,296 79
Composed wholly or in part of petroleum, costing less than 30 cents per imperial gallon	do	237,543	32,595	17,105 48
All other	do	81,179	38,661	9,695 77
Total			128,398	41,098 04
Oils, volatile or essential	Gallons	6,036	28,345	5,669 00
Oils, all other, not elsewhere specified	do	73,258	17,745	3,548 90
Oil-cloth:				
Floor	Sq. yards.	81,317	22,080	6,676 35
Other			94,674	28,526 27
Optical instruments, including microscopes and telescopes.			29,040	7,260 29
Packages			137,802	27.648 24
Paintings, drawings, engravings, and prints			47,598	9,556 85
PAINTS AND COLORS:				
Fire-proof paint, dry	Pounds	144,630	2,143	361 58
Paint ground in oil			56,625	14,190 38
Lampblack and ivory-black			12,209	1,220 90
White and red lead, dry	Pounds	47,491	2,561	128 85
White lead in pulp			92	4 60
Ochers, dry, ground or unground	do	498,890	4,566	456 60
Paris green, dry	do	109,703	17,961	1,796 10
Putty	do	22,069	555	138 65
Zinc, dry white	do	82,304	2.949	147 45
Other paints and colors, not elsewhere specified			42,043	8,413 35
Total			141,724	26,800 46
Palm leaf, &c., manufactures of			3,274	654 80
PAPER, AND MANUFACTURES:				
Bags, printed			4,889	1,466 70
Cards, playing	Packs	72,755	9.255	4,365 64
Calendered paper			88,827	19,968 19
Card-board and bristol-board, pasteboard, in sheets or cut.			35,210	10,563 95
Felt paper for roofing			192	47 92
Hangings or wall-paper in rolls, costing 8 cents or less for rolls.	Rolls	20,524	1,345	410 48
Hangings, &c., all other			204.804	61,483 56
Leather-board	Pounds	50,880	2,505	1,526 58
Boot and shoe counters	do	122,470	5,287	1,112 40
Mill-board, not straw-board			6,124	612 40
Collar-cloth paper			22,428	1,121 40
Envelopes, paper maché, and manufactures of paper not elsewhere specified.			150,242	37,563 94
Printing-paper			14,370	2,874 25
Ruled paper			28,760	7,192 25
Straw-board	Pounds	321,150	4,028	1,284 52
Wrapping-paper			8,794	1,759 40
All other paper, manufactures of, not elsewhere specified.			60,764	12,151 58
Total			648,523	165,525 16
Paraffine wax	Pounds	61,167	7,675	1,835 70
Pencils, lead			38,791	9,698 93
Perfumery			24,491	7,347 15
Pickles, sauces, and capers of all kinds			20,221	5,055 18
Plaster of Paris, ground	Pounds	221,047	635	221 65
Plaster of Paris, calcined	do	814,493	5,309	1,[illegible]
Plates, engraved			1,826	[illegible]

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

DUTIABLE—Continued.

ARTICLES.	Units of quantities.	Quantities.	Values.	Duty collected.
			Dollars.	*Dollars.*
Pomades, French or flower odors	Pounds	333	528	80 25
Pomades, other	do	13	21	6 30
Precious stones			554	55 40
Precious stones, imitations of			591	59 14
Printing-presses	Number	192	79,878	7,988 30
PROVISIONS, not elsewhere specified:				
Butter	Pounds	323,590	64,830	12,943 50
Cheese	do	60,569	9,776	1,817 10
Lard	do	3,061,537	192,706	61,235 27
Bacon, hams, shoulders, and sides	do	3,557,744	284,178	71,154 91
Beef	do	1,406,869	69,893	14,068 71
Beef, extract of, fluid			17,300	4,321 60
Mutton	Pounds	139,119	7,186	1,391 19
Pork	do	14,283,340	644,818	142,833 40
Poultry and game			12,642	2,528 50
Prepared meats	Pounds	476,524	50,847	9,530 49
Other meats, not elsewhere specified	do	62,629	5,375	1,252 61
Beef in the carcass in bond for export	do	9,931	634	99 31
Pork in the carcass in bond for export	do	159,700	6,811	1,597 00
Total			1,366,946	324,778 59
Pumice-stone, ground			194	38 80
Ribbons, not elsewhere specified			663	198 90
Sails, for boats; tents, and awnings			6,011	1,502 95
SALT:				
In bulk	Pounds	791,535	2,170	633 23
In bags and barrels	do	853,182	4,491	1,023 77
Sand-paper, glass, flint, and emery-paper			20,640	5,159 50
Sausage-casings			8,496	1,699 20
SEEDS:				
Flaxseed	Bushels	20,774	23,214	2,077 43
Flower, garden, &c			292,196	44,056 78
In small papers or parcels			5,388	1,347 78
Bulbous roots			1,862	372 50
Total			322,660	47,854 49
SHIPS:				
Hull, rigging, &c., except machinery			26,611	2,661 10
Boilers, engines, and other machinery			13,863	3,465 75
Repairs to			13,162	3,292 73
SILK, AND MANUFACTURES OF:				
Cords and tassels, braids, fringes, and galloons			4,529	1,340 65
Dress and piece goods			6,381	1,914 22
Handkerchiefs			1,754	526 20
Hosiery			155	46 65
Parasols, umbrellas, and sun-shades			578	173 40
Ready-made clothing			5,448	1,636 44
Ribbons			6,218	1,865 40
Silk in the gum, or spun	Pounds	43	54	18 50
Sewing silk and silk twist			30,649	7,687 40
Shawls			47	14 10
Silk, and all manufactures of, not elsewhere specified			63,724	19,117 34
Velvets	Yards	341	401	120 30
Total			119,938	34,455 60
SLATE, AND MANUFACTURES OF:				
Mantels			1,666	499 80
Roofing	Squares	326	1,798	317 06
School and writing			16,741	4,185 25
Slabs			5,446	1,361 50
Total			25,651	6,363 61
SOAP:				
Common, brown, or yellow	Pounds	347,942	18,457	5,219 49
Common, soft	do	22,135	1,547	309 88
Castile and white	do	66,294	4,270	1,325 88

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

DUTIABLE—Continued.

ARTICLES.	Units of quantities.	Quantities.	Values.	Duty collected.
Soap—Continued.			*Dollars.*	*Dollars.*
Perfumed or toilet			47, 301	14, 787 51
Soap powders	Pounds	401, 491	83, 246	12, 044 92
Total			104, 821	33, 037 13
Spices:				
Ginger, and spices of all kinds except nutmegs and mace—				
Unground	Pounds	605, 160	62, 340	6, 234 90
Ground	do	189, 523	10, 564	2, 642 40
Nutmegs and mace	do	8, 171	3, 093	773 25
Total			76, 006	9, 650 55
Spirits and wines:				
Absinthe	Gallons	9	32	19 00
Brandy	do	392	1, 301	1, 424 46
Geneva gin	do	309	121	541 18
Old Tom gin	do	419	517	561 16
Rum	do	8	48	12 18
Whisky	do	8, 164	14, 589	9, 091 98
Spirits unenumerated—				
Not sweetened or mixed	do	13, 704	7, 712	23, 670 25
Sweetened and mixed	do	1, 090	5, 486	2, 070 70
Spirits, &c., not elsewhere specified	do	339	1, 355	837 47
Spirits as proprietary medicines	do	712	6, 644	2, 793 00
Cologne-water, &c.—				
In bottles weighing not more than 4 ounces	do	537	8, 072	3, 366 81
In bottles weighing more than 4 ounces	do	199	2, 038	1, 001 27
Wines of all kinds, except sparkling, containing—				
26 per cent. or less of spirits	do	7, 468	7, 330	4, 009 77
Over 26 and not over 27 per cent	do	2, 319	3, 551	1, 764 76
Over 28 and not over 29 per cent	do	27	106	40 98
Over 30 and not over 31 per cent	do	427	443	303 70
Over 31 and not over 32 per cent	do	703	461	440 59
Over 32 and not over 33 per cent	do	2	9	3 62
Over 33 and not over 34 per cent	do	133	98	94 57
Over 34 and not over 35 per cent	do	4	12	5 08
Over 35 and not over 36 per cent	do	12	55	23 10
Over 36 and not over 37 per cent	do	96	85	81 18
Over 39 and not over 40 per cent	do	3	5	3 51
Champagne and all other sparkling wines, containing—				
Not more than one quart and more than one pint.	Dozen	404	5, 320	2, 808 00
Not more than one pint and more than one half pint.	do	677	4, 336	2, 466 30
One half pint or less	do	48	210	101 70
Total			70, 445	58, 216 93
Sponges			20, 201	4, 040 30
Starch	Pounds	860, 386	19, 005	7, 207 73
Stone, and manufactures of:				
Dressed freestone, and other building	Tons	1, 115	4, 781	956 20
Rough freestone, and other building	do	6, 343	36, 038	6, 344 03
Grindstones	do	926	12, 292	1, 853 80
Manufactures of, not elsewhere specified			22, 303	4, 461 25
Flagstones, dressed	Tons	1, 602	9, 443	2, 403 76
Total			85, 452	16, 019 04
Straw	Tons	25	96	19 20
Straw, manufactures of			7, 875	1, 575 00
Sugars, sirups, and molasses (under old tariff):				
Sugar—				
Refined	Pounds	727, 670	47, 792	24, 218 77
Not imported direct, above No. 14	do	1, 035, 962	56, 880	30, 845 64
Equal to No. 9, not above No. 14	do	953, 554	29, 911	17, 187 60
Below No. 9	do	4, 430, 938	131, 492	61, 828 58
Melada and concentrated melada	do	514, 362	12, 832	5, 778 46
Sirups, cane juice, and refined sirups	do	345, 884	15, 639	6, 934 66

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA &c., 1886—Continued.

ARTICLES.	Units of quantities.	Quantities.	Values.	Duty collected.
SUGAR, &c. (under old tariff)—Continued.			*Dollars.*	*Dollars.*
Molasses:				
Imported direct	Gallons	7, 886	1, 467	220 05
Not imported direct	do	46, 049	7, 413	1, 482 60
SUGAR, SIRUPS, AND MOLASSES (under new tariff):				
Sugar—				
Imported direct, above No. 14	Pounds	159, 619	10, 085	5, 923 30
Imported direct, not above No. 14	do	2, 952	86	55 82
Not imported direct, above No. 14	do	37, 100	952	956 65
Not imported direct, not above No. 14	do	20, 504	635	425 19
Sugar, melada, concentrated melada, &c., not imported direct.	do	1, 961, 593	45, 267	24, 821 16
Sirups, cane-juice, and refined sirups	do	94, 438	4, 314	2, 238 57
Molasses, other, not imported direct	Gallons	9, 480	1, 087	217 40
Sugar candy and confectionery	Pounds	306, 066	50, 633	21, 007 25
Total			416, 485	204, 141 20
Glucose, or grape sugar	do	8, 091	318	189 58
Glucose sirup	do	815, 111	24, 014	16, 310 62
Tallow	do	129, 071	6, 896	1, 291 73
TEA:				
Black	do	175, 735	38, 655	3, 865 60
Green and Japan	do	1, 866, 460	309, 104	80, 910 50
Telephones			6, 184	1, 543 32
Telegraphic instruments			9, 432	2, 358 00
TIN, AND MANUFACTURES OF:				
Cans or packages not exceeding 1 quart in contents.	Number	70		1 19
Cans or packages exceeding 1 quart in contents	do	600		18 00
Tin crystals			1, 010	202 00
Tinware, and all manufactures of tin, n. e. s			108, 575	27, 148 30
Total			109, 585	27, 369 49
TOBACCO, AND MANUFACTURES OF:				
Cigars and cigarettes	Pounds	29, 665	50, 856	45, 769 55
Snuff	do	10, 821	2, 404	8, 530 35
All other manufactures of	do	151, 652	61, 165	52, 682 98
Leaf, samples of	do	258	69	51 55
Tobacco pipes, n. e. s			4, 503	900 95
Total			118, 997	102, 935 48
TREES:				
Fruit	Number	286, 454	34, 877	7, 280 75
Do			7, 192	1, 438 20
Shade, lawn, and ornamental			38, 094	7, 019 27
Turpentine, spirits of	Gallons	350, 995	145, 225	14, 562 55
Trunks, satchels, &c			49, 634	14, 800 24
Twines of all kinds	Pounds	505, 589	68, 070	17, 020 50
Unenumerated articles			176, 045	35, 377 47
Varnish, lacquers, &c	Gallons	41, 282	77, 459	23, 750 77
VEGETABLES:				
Potatoes	Bushels	58, 157	26, 609	5, 816 08
Tomatoes	do	10, 627	17, 499	3, 188 87
Canned:				
Packages not over 1 pound	Pounds	91, 401	5, 044	1, 827 84
Packages over 1 pound	do	458, 528	10, 593	9, 171 77
Prepared and preserved, n. e. s			3, 222	644 40
Sweet potatoes and all other, n. e. s			78, 645	15, 729 18
Total			150, 612	36, 378 14
Vinegar	Gallons	7, 268	1, 469	1, 090 09
WATCHES			46, 217	11, 557 77
Cases			76, 136	19, 034 00
Actions or movements			156, 283	31, 258 70
Wax, and manufactures of			15, 467	3, 077 50
Whips			50, 183	13, 269 03
WOOD, AND MANUFACTURES OF:				
Barrels containing petroleum, &c	Number	94, 346	141, 064	37, 739 89
Fishing rods			2, 020	606 00

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

DUTIABLE—Continued.

ARTICLES.	Units of quantities.	Quantities.	Values.	Duty collected.
WOOD, AND MANUFACTURES OF—Continued.			*Dollars.*	*Dollars.*
Furniture, house and cabinet			164,447	57,569 24
Caskets and coffins			3,607	1,262 45
Hubs, spokes, &c			7,270	1,090 80
Moldings:				
Plain			1,349	337 25
Gilded			19,140	5,741 85
Shingles	M	12,497	15,155	3,032 90
Show cases	M	596	5,264	3,042 80
Wooden ware			27,724	6,931 17
Manufactures of, n. e. s			361,570	90,412 94
Lumber and timber			88,123	17,661 15
Picture frames			17,628	6,169 71
Pipes, tobacco, wooden			6,766	1,691 50
Total			861,127	233,269 65
Willow or ozier wares, &c			7,348	2,181 53
WOOL, MANUFACTURES OF:				
Blankets	Pounds	2,735	1,971	580 93
Cassimeres, cloths, coatings, &c	do	29,924	31,445	8,533 29
Flannels	Yards	8,279	9,286	2,478 35
Hosiery	Pounds	7,298	12,291	3,011 06
Shawls			1,979	494 63
Yarn	Pounds	2,184	1,982	546 69
All other, n. e. s	do		60,927	13,709 86
Clothing, ready made	Pounds	14,844	22,532	7,118 16
Carpets:				
Brussels and tapestry	Yards	8,447	5,032	1,258 00
Two-ply, &c., wholly of wool	Sq. yards	2,065	1,343	475 22
Two-ply, &c., partly of wool	do	829	442	131 57
Felt, pressed			6,280	853 52
Winceys	Yards	7,223	2,224	500 40
Woolen netting			4,521	452 16
Total			102,185	40,152 80
Wool, unmanufactured, class 1	Pounds	60	11	1 80
ZINC:				
Seamless drawn tubing	Feet	344	91	9 10
Manufactures of			6,138	1,534 65
Duty collected in Northwest Territory not classified				617 74
TOTAL DUTIABLE MERCHANDISE ENTERED FOR CONSUMPTION			29,650,876	6,769,354 69

FREE GOODS.

ARTICLES.	Units.	Quantities.	Value.
THE MINE.			
			Dollars.
Burr stones, in block, unmanufactured	Number	1,386	2,809
Chalk and cliff stone	Cwts	69	73
CLAYS:			
China clay, natural or ground	do	4,024	1,115
Fire clay	do	59,010	8,774
Pipe clay	do	2,428	224
All other	do	20,056	6,372
Emery			9,139
Pumice and pumice stone, ground or unground			2,354
Flint, flints, and ground flint stone	Cwts	638	385
Fossils			45
Fuller's earth	Cwts	165	115
Gravel and sand	do	13,226	22,692
Gypsum, crude	do	1,870	2,429
Iron sand or globules, and dry putty for polishing granite	do	96	767
Marble in blocks, from the quarry, in the rough, or sawn on two sides only.			1,202

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

FREE GOODS—Continued.

ARTICLES.	Units.	Quantities.	Value.
THE MINE—continued.			
MINERALS:			
Litharge	Cwts	1,314	4,223
All other			260
Mineral waters, natural, not in bottles	Gallons	14,805	1,584
Mineralogy, specimens of			214
Ores of metals, all kinds	Cwts	33,841	5,663
Precious stones			15,422
Salt, imported from the United Kingdom, or any British possession, or imported for the sea or Gulf fisheries.	Pounds	4,667,860	7,355
Silex or crystallized quartz	Cwts	2,520	1,313
Whiting or whitening	do	2,406	1,876
Total			76,414
THE FISHERIES.			
Ambergris			43
Furs or skins, undressed, the produce of fish, &c			151
Pearl, mother of, unmanufactured			57
Tortoise and other shells			457
Turtles	Number	116	416
Whalebone, unmanufactured	Cwts	13	3,077
FISH:			
Cod, haddock, ling, and pollock, fresh	Pounds	3,350	165
Bait, fish, clams, or other	Barrels	157	754
Fish-oil: Whale	Gallons	290	164
Total			5,284
THE FOREST.			
Corkwood			16,887
BARKS:			
Corkwood			25,503
Hemlock	Cords	49	209
Oak and tanners'			2,020
Ivory nuts (vegetable)			31,018
Logs, and round unmanufactured timber			493,196
LUMBER AND TIMBER, PLANK AND BOARD, SAWN, NOT SHAPED, PLANED, OR OTHERWISE MANUFACTURED:			
Boxwood, cherry, chestnut, gumwood, and hickory	M feet	314	12,177
Mahogany	do	144	22,166
Oak	do	1,744	51,151
Pitch pine	do	2,557	48,108
Rosewood and sandal wood	do	14	381
Spanish cedar	do	226	9,640
Walnut	do	3,087	154,199
Hickory, sawn to shape for spokes of wheels			13,409
Sawdust			379
Wood, for fuel, imported into Manitoba and Northwest Territory.	Cords	1,373	5,577
Wood, all other, not further manufactured than sawn or split	M feet	42	1,771
Total			887,791
ANIMALS AND THEIR PRODUCTS.			
ANIMALS FOR IMPROVEMENT OF STOCK:			
Horses	Number	201	125,753
Cattle	do	150	70,791
Sheep	do	14	350
Swine	do	80	1,523
Fowls, pure bred, &c	do	1,023	3,258
Dogs	do	16	315
Imported for ranches in Manitoba and Northwest Territory:			
Horses and mules	do	577	26,150
Cattle	do	1,800	55,197
Sheep	do	2,543	6,857
Imported as settlers' effects into Northwest Territory—Horses and mules	do	7	335
For zoological gardens	do	4	460
Bees			2,331
Bones, crude, not manufactured, burned, calcined, ground, or steamed	Cwts	224	288
Bone dust and bone ash for manufacture of phosphates and fertilizers	do	144	266
Bristles	Pounds	56,906	51,191

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

FREE GOODS—Continued.

ARTICLES.	Units.	Quantities.	Value.
ANIMALS AND THEIR PRODUCTS—continued.			*Dollars.*
Cat-gut and whip-gut, unmanufactured, or manufactured for whip and other cord.			430
Eggs	Dozen	264, 167	44, 261
Fur skins, undressed			165, 230
Grease for soap stock	Pounds	3, 360, 129	145, 517
Guano and other animal manures	Cwts	4, 983	2, 924
HAIR, cleaned or uncleaned, but not curled and otherwise manufactured:			
Alpaca, angola, and goat	Pounds	56, 427	4, 711
Buffalo, bison, and camel	do	55, 787	3, 143
Hog and horse	do	76, 594	22, 696
Human	do	368	3, 189
Hatters' furs, not on the skin			19, 652
Hides, raw, whether dry, salted, or pickled, skins and tails undressed.			1, 650, 541
Hoofs, horns, and horn tips			7, 494
Ivory, unmanufactured	Pounds	697	2, 939
Leeches			204
Musk, in pods or in grains	Ounces	86	760
Pelts			8, 228
Rennet			31, 468
Silk, raw, or as reeled from the cocoon	Pounds	36, 149	150, 959
Silk cocoons and silk waste			2, 257
Sausage skins, and casings, not cleaned			5, 425
Wool, unmanufactured	Pounds	4, 166, 745	502, 670
Total			3, 209, 263
AGRICULTURAL, PRODUCTS.			
Bamboo reeds, not further manufactured than cut in suitable lengths for walking sticks or umbrellas, and bamboos unmanufactured			1, 277
Broom, corn			121, 709
FIBER:			
Mexican, fibrilla and istle, or Tampico fiber	Cwts	1, 825	14, 307
Other vegetable	do	4, 916	13, 359
Foot grease, the refuse of the cotton seed, after the oil is pressed out	do	33	74
Hemp, undressed	do	48, 373	182, 907
Jute butts and jute	do	10, 703	17, 551
Locust beans	Pounds	920	25
Manilla grass	Cwts	41	234
Manures, vegetable	do	35	24
Palm leaf, unmanufactured			459
Rattans and reeds, unmanufactured			10, 025
Trees, forest, for planting			557
Tobacco, unmanufactured, for excise purposes	Pounds	13, 740, 208	1, 004, 544
Vegetable fibers, natural, not produced by any mechanical process	Cwts	350	666
Willow, for basket making			529
Total			1, 968, 337
MANUFACTURED AND PARTIALLY MANUFACTURED ARTICLES.			
Ashes, not pearl and soda	Barrels	311	5, 120
Asphaltum	Cwts	1, 108	2, 687
Bells for churches			22, 779
Bent glass for the manufacture of show cases			580
Bolting cloths, not made up			16, 866
Books, bound, printed more than seven years at date of importation, not for trade purposes			12, 077
Brim-molds and molds and skins for gold beaters			529
Buckram for hat and bonnet shapes			728
Canvas, for manufacture of floor oil cloth and less than 45 inches wide	Yards	18, 638	1, 904
Cat-gut strings or gut-cord for musical instruments			2, 434
Celluloid and xyolite in sheets, lumps, or blocks			6, 771
Cherry heat welding, compound			832
Chronometers and compasses for ships			2, 370
Citrons, lemons, and oranges, in brine for candying			322
Cocoa, bean, shell and nibs	Pounds	118, 284	19, 123
Communion plate and plated ware for use in churches			3, 887
Cotton waste	Pounds	1, 122, 652	79, 778
Cotton wool	do	29, 709, 054	2, 891, 200
Cotton yarns	do	5, 075	1, 219
Coir and coir yarn	do	119, 643	6, 750

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

FREE GOODS—Continued.

ARTICLES.	Units.	Quantities.	Value.
MANUFACTED AND PARTIALLY MANUFACTURED ARTICLES—continued.			*Dollars.*
Colors, dry	Pounds	427,347	17,987
Diamond drills for prospecting for minerals	Number	1	1,152
DRUGS, DYES, CHEMICALS, AND MEDICINES:			
Aniline dyes in bulk, &c	Pounds	146,083	82,356
Borax	do	190,098	13,676
Brimstone, crude	do	1,572,254	17,470
Dye, jet black	do	155,987	19,495
Dyeing or tanning articles in a crude state	do	4,772,086	116,827
Extract of logwood	do	1,434,622	56,294
Gums	do	822,730	147,197
Indigo	do	66,651	37,216
Quinine, sulphate of, in powder	do	16,470	14,805
Soda, nitrate of soda, soda ash, soda caustic, sal soda, and soda silicate of	do	1,694,384	34,892
All other			94,167
Duck, for belting and hose			27,003
Fancy grasses, dried but not colored, or otherwise manufactured			242
Felt, adhesive, for sheathing vessels			15
FISHERIES, FOR THE USE OF:			
Fish hooks			1,675
Nets and seines			53,727
Lines and twines			97,168
Gas coke	Tons	980	3,478
Gutta-percha and India rubber, crude	Pounds	627,124	348,219
Hatters' plush, of silk or cotton			188
Horn strips, used in making corsets			648
Iron liquor, solution of acetate of iron, for dyeing and calico printing.			1,791
Junk, old, and oakum	Cwts	4,326	18,221
Jute-cloth, as taken from the loom, to be manufactured into bags only.	Yards	1,937	99
Kelp and sea-grass and sea-weed	Cwts	600	425
Manuscripts			142
METALS:			
Anchors	Cwts	198	1,198
Bismuth, metallic	Pounds	33	74
Brass, old, scrap and in sheet	Cwts	4,987	37,600
Britannia metal, in pigs and bars	do	176	3,795
Copper, in sheets	do	2,891	37,939
Hoop-iron	do	58	735
Iron masts for ships, or parts of			1,000
Iron and steel, old and scrap	Cwts	23,715	17,507
Iron and steel beams, sheets, &c	do	105	229
Platinum wire	do	117	1,134
Silver and German silver	Pounds	27,772	9,981
Steel railway bars	Cwts	3,772	5,485
Steel for skates	do	242	973
Steel for saws	do	2,228	21,463
Steel of No. 20 gauge and thinner	do	11	53
Steel, in sheets	do	390	1,626
Crucible sheet-steel	do	414	2,990
Spelter, in blocks and pigs	do	464	2,199
Tin, in blocks, pigs, and bars	do	4,243	81,879
Tin plates and sheets	do	31,089	124,849
Tin-foil	Pounds	59,281	10,949
Wire:			
Of brass, round or flat	do	104,167	19,914
Of copper	do	177,188	28,603
Of spring steel, coppered	do	315,765	17,699
Of iron and steel, galvanized, or tinned, or not	do	730,412	48,725
Rigging, for ships and vessels	Cwts	270	1,456
Yellow metal, in bars, bolts, and for sheathing	do	625	6,670
Zinc, in blocks, pigs, and sheets	do	1,828	8,247
Moss, sea-weed, &c., used for beds and mattresses, in their natural state	do	7,567	27,526
Newspapers and other periodical literary papers			54,226
Oil cake and meal, cotton-seed cake and meal, palm-nut cake and meal	Cwts	11,312	14,046
Oils, cocoa-nut and palm, in their natural state	Gallons	106,872	61,146
Packages not otherwise provided for			10,381
Philosophical instruments and apparatus, when imported for use in schools and scientific societies			7,240
itch and tar, pine, in packages of not less than 15 gallons	Barrels	4,457	9,360
laits, straw, Tuscan, and grass			12,534
otash, German mineral	Pounds	9,043	287
Potash, muriate and bichromate of, crude	do	486,193	9,111

No. 91.—MERCHANDISE IMPORTED from the UNITED STATES and ENTERED for CONSUMPTION in the DOMINION OF CANADA, &c., 1886—Continued.

FREE GOODS—Continued.

ARTICLES.	Units.	Quantities.	Values.
			Dollars.
MANUFACTURED AND PARTIALLY MANUFACTURED ARTICLES—Cont'd.			
Rags, paper-waste, and waste of any kind fit only for manufacture of paper	Cwts	86,013	113,163
Red liquor, or crude acetate of aluminium prepared from pyroligenous acid, for dyeing and calico printing			195
Rosin, in packages of not less than 15 gallons	Barrels	19,796	91,550
Rubber, hard, crude, in sheets, plain or molded	Pounds	111,938	53,579
Rubber, recovered, and rubber substitute	do	19,499	1,466
Seeds, anise, coriander, fennel, and fenugreek	do	39,656	2,063
Spurs and stilts, used in the manufacture of earthenware			308
Teasels			1,859
Treenails	M	15	822
Turpentine, raw or crude	Pounds	6,556	58
Varnish, black and bright, for ships' use	Gallons	1,089	231
Veneers of wood and ivory, sawn only			50,800
White shellac, for manufacturing purposes	Pounds	9,979	1,571
Woolen rags	do	932,522	51,200
Total			5,353,148
MISCELLANEOUS ARTICLES.			
Anatomical preparations			504
Apparel, wearing, and other personal effects of British subjects dying abroad			2,384
Articles for the use of the governor-general and consuls-general			1,273
Articles for the use of the Dominion Government			170,788
Articles for the use of the army, navy, and the Canadian militia			19,815
Articles ex-warehoused for ships' stores			95,922
Botany, specimens of			4
Cabinet of coins, medals, and all other collections of antiquities			1,706
Casts of models for the use of schools of design			182
Clothing, donations for charitable purposes			1,642
Entomology, specimens of			262
Ice			996
Medals of gold, silver, or copper			1,640
Models of invention			18,163
Paintings, in oil or water colors, by artists of well-known merit, or copies of the old masters by such artists			125,141
Settlers' effects			1,041,029
Vaccine and ivory vaccine points			9,710
Coin and bullion, except United States silver coin			2,038,368
Articles for the use of Atlantic Telegraph Company			417
Lastings, mohair cloth, &c., for covering buttons			212
Total			3,530,178
SPECIAL EXEMPTIONS.			
For construction of Canadian Pacific Railway:			
Bolts and nuts	Pounds	20	1
Iron bridges	do	239,910	9,896
Steel rails	do	704,440	8,082
Other material for bridges			1,928
Wire for telegraph lines	Pounds	206,142	1,384
For construction of Esquimalt and Nanaimo Railroad:			
Bolts and nuts	do	40,802	1,164
Fish-plates	do	5,524,112	38,894
Spikes	do	50,000	1,600
Steel rails	do	2,240,000	80,263
Other material for bridges			4,287
Telegraph apparatus			359
Total			147,748
TOTAL FREE MERCHANDISE ENTERED FOR CONSUMPTION			15,198,163

RECAPITULATION.

	Dollars.
DUTIABLE MERCHANDISE ENTERED FOR CONSUMPTION	29,659,876 00
FREE MERCHANDISE ENTERED FOR CONSUMPTION	15,198,163 00
TOTAL ENTERED FOR CONSUMPTION	44,858,039 00
DUTY COLLECTED	6,769,354 69

No. 92.—STATEMENT showing the TOTAL VALUES of MERCHANDISE IMPORTED into the United States from the British North American Provinces, and of MERCHANDISE IMPORTED into and ENTERED FOR CONSUMPTION in the British North American Provinces from the United States, during each Year from 1850 to 1886, inclusive (see note 5).

YEARS.	Imports into the United States from the British North American Possessions.	Imports into the British North American Possessions from the United States.	Excess of imports into the United States.	Excess of imports into the British North American Possessions.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*
1850	5,179,500	11,608,641		6,429,141
1851	5,279,718	14,263,751		8,984,033
1852	5,409,445	13,933,570		8,524,125
1853	6,527,559	19,445,478		12,917,919
1854	8,784,412	26,115,132		17,330,720
1855	15,118,289	34,362,188		19,243,899
1856	21,276,614	35,764,980		14,488,366
1857	22,108,916	27,788,238		5,679,322
1858	15,784,836	22,210,837		6,426,001
1859	19,287,565	26,761,618		7,474,053
1860	23,572,796	25,871,399		2,298,603
1861	22,724,489	28,520,735		5,796,246
1862	18,515,685	30,373,212		11,857,527
1863	17,191,217	29,680,955		12,489,738
1864	29,608,736	7,952,401		
1865	33,264,403	27,269,158	5,995,245	
1866	48,528,628	27,905,984	20,622,644	
1867	25,044,005	25,239,459		195,454
1868	26,261,378	22,644,235	3,617,143	
1869	29,293,766	21,680,062	7,613,704	
1870	36,265,328	21,869,447	14,395,881	
1871	32,542,137	27,185,586	5,356,551	
1872	36,346,930	33,741,995	2,604,935	
1873	37,649,532	47,223,171		9,573,639
1874	34,365,961	53,430,424		19,064,463
1875	28,270,926	50,319,993		22,049,067
1876	29,010,251	45,502,201		16,491,950
1877	24,277,378	53,524,029		29,246,651
1878	25,357,802	50,324,123		24,966,321
1879	26,133,554	45,196,601		19,063,047
1880	33,214,340	41,926,563		8,712,223
1881	38,041,947	50,955,925		12,913,978
1882	51,113,475	55,270,580		4,157,105
1883	44,740,876	65,018,933		20,278,057
1884	39,015,840	59,845,968		20,830,128
1885	36,960,541	53,397,608		16,437,067
1886	37,496,338	49,773,232		12,276,894

NOTES.

1. All of the above data are given for years ending June 30, except that the imports into the British provinces from 1850 to 1863 are for calendar years, and those for 1864 are for the six months ending June 30.

2. The imports into the British provinces from 1850 to 1867 comprise the imports into the provinces of Quebec and Ontario, as taken from the Canadian accounts, plus the exports to the other provinces of the present Dominion, as taken from the United States accounts; the imports into the British provinces for the remaining years are taken exclusively from the Canadian accounts, with the following additions from the United States accounts, viz: 1868, exports to British Columbia, $1,178,813; 1869, exports from Minnesota, $182,682; 1870, exports from Minnesota, $172,210; 1873 to 1886, exports from the United States to Newfoundland and Labrador. The accounts of these exports, which were exclusively by water, are reliable.

3. The imports into the United States for 1864 and from 1868 to 1886 include the imports from all British North American Possessions.

4. For the gradual formation of the present Dominion of Canada see Statement No. 93.

5. The imports into the British North American provinces from 1850 to include 1875 are the imports entered for consumption, and those from 1876 to 1885, inclusive, are the general imports of merchandise.

No. 93.—STATEMENT showing the TOTAL VALUES of MERCHANDISE IMPORTED from the UNITED STATES into and entered for CONSUMPTION in the several Provinces of the DOMINION of CANADA, from its formation until its present composition, during each Year ending June 30, from 1868 to 1874, inclusive.

[From the "Trade and Navigation of the Dominion of Canada."]

PROVINCES.	1868.	1869.	1870.	1871.	1872.	1873.	1874.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Ontario	17,605,405	10,728,023	11,161,547	13,670,781	18,143,986	26,500,791	29,480,967
Quebec		6,054,633	6,454,291	8,828,539	8,604,746	11,245,303	12,675,902
Nova Scotia	2,640,887	2,560,023	2,258,079	2,250,764	2,991,835	2,950,779	3,328,114
New Brunswick	1,219,130	2,154,701	1,823,320	2,323,339	2,599,811	2,970,054	3,894,484
Manitoba	....	....	....	112,163	321,658	441,550	781,277
British Columbia	....	....	....	....	1,070,950	1,080,624	1,228,497
Prince Edward Island	....	....	....	....	....	....	394,803
Dominion of Canada	21,465,422	21,497,380	21,697,237	27,185,586	33,741,995	45,189,110	51,785,154

No. 94.—STATEMENT showing, by PROVINCES, the Value of MERCHANDISE IMPORTED from the United States into the Dominion of Canada and entered for CONSUMPTION, with the amounts of Duty collected, during each of the Years ending June 30, from 1875 to 1886, inclusive, with the average ad valorem rates of duty and the percentages of free and dutiable merchandise.

[From the "Trade and Navigation of the Dominion of Canada."]

YEARS AND PROVINCES.	TOTAL VALUE ENTERED FOR CONSUMPTION.			Duties collected.	AVERAGE AD VALOREM RATES OF DUTY ON—		PERCENTAGE OF TOTAL VALUE.	
	Free.	Dutiable.	Total.		Dutiable.	Free and dutiable.	Free.	Dutiable.
1875.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Per ct.*	*Per ct.*		
Ontario	14,013,396	10,679,477	24,692,873	1,844,579 73				
Quebec	8,114,097	6,315,502	14,429,599	1,097,974 93				
Nova Scotia	1,997,224	1,447,173	3,444,397	241,232 37				
New Brunswick	1,875,154	1,820,596	3,695,750	330,695 13				
British Columbia	262,540	988,431	1,250,971	195,416 50				
Manitoba	246,026	536,258	782,284	86,674 38				
Prince Edward Island	109,375	236,228	345,603	50,295 73				
Total	26,617,812	22,023,665	48,641,477	3,846,868 77	17.47	7.91	54.72	45.28
1876.								
Ontario	13,349,814	10,913,454	24,263,268	2,128,542 48				
Quebec	5,751,163	5,560,656	11,311,819	1,025,859 96				
Nova Scotia	1,804,168	1,294,650	3,098,818	234,517 65				
New Brunswick	1,086,391	1,539,586	2,625,977	309,237 87				
Manitoba	377,850	562,161	940,011	106,279 10				
British Columbia	290,772	1,229,140	1,519,912	245,966 93				
Prince Edward Island	105,109	232,858	337,967	49,708 90				
Total	22,765,267	21,332,505	44,097,772	4,100,112 89	19.22	9.30	51.62	48.38
1877.								
Ontario	14,585,077	11,709,848	26,294,925	2,224,879 00				
Quebec	7,451,078	6,044,282	13,495,360	1,106,983 29				
Nova Scotia	1,952,630	1,736,967	3,689,597	292,671 39				
New Brunswick	1,267,878	2,034,111	3,301,989	382,673 15				
Manitoba	139,442	647,049	786,491	120,881 86				
British Columbia	311,137	1,044,559	1,355,696	204,199 14				
Prince Edward Island	157,925	294,182	452,107	56,449 52				
Total	25,865,167	23,510,998	49,376,165	4,388,737 35	18.67	8.89	52.38	47.62

No. 93.—IMPORTS from the UNITED STATES into the DOMINION of CANADA entered for CONSUMPTION, &c., 1875 to 1886—Continued.

YEARS AND PROVINCES.	TOTAL VALUE ENTERED FOR CONSUMPTION.			Duties collected.	AVERAGE AD VALOREM RATES OF DUTY ON—		PERCENTAGE OF TOTAL VALUE.	
	Free.	Dutiable.	Total.		Dutiable.	Free and dutiable.	Free.	Dutiable.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Per ct.*	*Per ct.*		
1878.								
Ontario	15,365,626	10,777,509	26,143,135	2,246,795 45				
Quebec	5,946,805	5,678,239	11,625,044	1,192,945 25				
Nova Scotia	1,497,053	1,694,703	3,191,756	314,744 14				
New Brunswick	1,172,374	3,041,402	4,213,776	576,620 23				
Manitoba	110,145	636,952	747,097	140,118 15				
British Columbia	334,695	1,207,925	1,542,620	241,825 32				
Prince Edward Island	109,128	303,543	412,671	56,384 97				
Northwest Territories	....	112,307	112,307	19,078 15				
Total	24,535,826	23,452,580	47,988,406	4,788,511 66	20.42	9.98	51.13	48.87
1879.								
Ontario	11,144,931	11,752,392	22,897,323	2,745,099 35				
Quebec	4,730,542	6,158,792	10,889,334	1,500,793 67				
Nova Scotia	1,231,629	1,691,981	2,923,610	349,087 40				
New Brunswick	805,396	1,791,049	2,596,445	395,293 81				
Manitoba	52,954	783,218	836,172	185,377 12				
British Columbia	288,072	1,160,605	1,448,677	258,147 89				
Prince Edward Island	85,095	226,090	311,185	49,849 39				
Northwest Territories	28,230	129,232	157,462	24,828 63				
Total	18,366,849	23,693,359	42,060,208	5,508,477 26	23.25	13.10	43.67	56.33
1880.								
Ontario	4,070,464	10,062,620	14,133,084	2,289,901 52				
Quebec	3,547,164	4,503,678	8,050,842	1,114,997 91				
Nova Scotia	409,246	1,528,150	1,937,396	299,971 40				
New Brunswick	398,311	1,313,329	1,711,640	275,730 42				
Manitoba	63,218	784,040	847,258	195,762 51				
British Columbia	106,054	1,088,528	1,194,582	275,154 87				
Prince Edward Island	32,669	168,672	201,341	38,950 24				
Northwest Territories	90	117,550	117,640	21,856 38				
Total	8,627,216	19,566,567	28,193,783	4,512,415 25	23.06	16.00	30.60	69.40
1881.								
Ontario	4,968,069	12,444,261	17,412,330	2,699,999 46				
Quebec	4,391,779	6,580,380	10,972,159	1,512,061 59				
Nova Scotia	400,068	1,795,120	2,195,188	354,132 59				
New Brunswick	600,283	1,650,377	2,250,660	344,121 21				
Manitoba	103,901	1,381,698	1,485,599	315,270 27				
British Columbia	205,949	1,408,490	1,614,439	343,628 74				
Prince Edward Island	34,776	189,751	224,527	45,689 15				
Northwest Territories	1,563	182,236	183,799	34,248 88				
Total	10,706,388	25,632,313	36,338,701	5,649,151 89	22.04	15.55	29.46	70.54
1882.								
Ontario	6,087,528	15,098,924	21,186,452	3,143,505 91				
Quebec	5,412,902	8,633,031	14,045,933	1,882,543 85				
Nova Scotia	483,167	1,751,284	2,234,451	345,402 05				
New Brunswick	789,603	1,933,915	2,723,518	412,003 55				
Manitoba	864,410	3,532,038	4,396,478	825,040 89				
British Columbia	302,052	1,544,887	1,846,939	376,042 26				
Prince Edward Island	32,607	152,907	185,514	37,618 70				
Northwest Territories	139,575	294,075	433,650	51,755 28				
Total	14,111,874	32,941,061	47,052,935	7,073,912 49	21.47	15.03	29.99	70.01
1883.								
Ontario	6,664,088	17,234,091	23,898,179	3,490,335 35				
Quebec	5,609,940	8,334,565	13,944,505	1,779,677 02				
Nova Scotia	742,042	2,232,891	2,974,936	423,570 56				
New Brunswick	959,383	2,255,390	3,214,773	472,380 39				
Manitoba	1,865,118	6,001,368	7,866,486	1,393,302 19				
British Columbia	312,415	2,034,030	2,346,445	487,401 30				
Prince Edward Island	31,841	144,452	176,293	33,463 86				
Northwest Territories	310,371	415,255	725,626	68,137 00				
Total	16,495,198	38,652,045	55,147,243	8,148,267 67	21.08	14.78	29.91	70.09

No. 94.—IMPORTS from the UNITED STATES into the DOMINION of CANADA entered for CONSUMPTION, &c., 1875 to 1886—Continued.

YEAR AND PROVINCES.	TOTAL VALUE ENTERED FOR CONSUMPTION.			Duties collected.	AVERAGE AD VALOREM RATES OF DUTY ON—		PERCENTAGE OF TOTAL VALUE.	
	Free.	Dutiable.	Total.		Dutiable.	Free and dutiable.	Free.	Dutiable.
1884.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Per ct.*	*Per ct.*		
Ontario	5,791,798	18,014,092	23,805,890	3,617,647 74				
Quebec	4,943,302	8,785,793	13,729,095	1,815,599 34				
Nova Scotia	754,587	2,203,152	2,957,739	439,038 80				
New Brunswick	1,048,515	2,049,774	3,098,289	452,629 92				
Manitoba	970,160	2,170,520	3,140,680	494,748 58				
British Columbia	246,902	2,060,710	2,307,612	480,181 44				
Prince Edward Island	79,906	179,938	259,844	41,952 44				
Northwest Territories	154,021	332,718	486,739	70,148 10				
Total	13,989,191	35,796,607	49,785,888	7,411,946 37	27.06	14.89	28.10	71.90
1885.								
Ontario	6,571,225	15,802,811	22,374,036	3,192,070 25				
Quebec	6,565,053	7,798,697	14,363,750	1,613,847 85				
Nova Scotia	753,268	1,868,180	2,621,448	390,138 15				
New Brunswick	977,997	1,821,443	2,799,440	433,913 14				
Manitoba	466,727	1,524,543	1,991,270	374,059 65				
British Columbia	228,869	2,152,167	2,381,036	547,233 04				
Prince Edward Island	49,928	180,091	230,019	45,933 30				
Northwest Territories	306,187	84,015	390,202	17,905 01				
Total	15,919,254	31,231,947	47,151,201	6,624,100 39	21.21	14.05	33.76	66.24
1886.								
Ontario	5,870,328	15,457,979	21,328,307	3,288,457 20				
Quebec	6,707,868	7,733,975	14,441,843	1,759,820 60				
Nova Scotia	629,428	1,587,980	2,217,408	430,647 84				
New Brunswick	1,162,619	1,816,146	2,978,765	464,808 69				
Manitoba	244,614	1,031,094	1,275,708	284,339 56				
British Columbia	441,018	1,812,424	2,253,442	477,206 58				
Prince Edward Island	53,539	126,236	179,775	44,441 22				
Northwest Territories	88,749	94,042	182,791	19,633 50				
Total	15,198,163	29,659,876	44,858,039	6,769,354 69	22.82	15.09	33.88	66.12

RECAPITULATION.

1875	26,617,812	22,023,665	48,641,477	3,846,868 77	17.47	7.91	54.72	45.28
1876	22,765,267	21,332,505	44,097,772	4,100,112 89	19.22	9.30	51.62	48.38
1877	25,865,167	23,510,998	49,376,165	4,388,737 35	18.67	8.89	52.38	47.62
1878	24,535,826	23,452,580	47,988,406	4,788,511 66	20.42	9.98	51.13	48.87
1879	18,366,849	23,693,359	42,060,208	5,508,477 26	23.25	13.10	43.67	56.33
1880	8,627,216	19,666,567	28,193,783	4,512,415 25	23.06	16.00	30.60	69.40
1881	10,706,388	25,632,313	36,338,701	5,649,151 89	22.04	15.55	29.46	70.54
1882	14,111,874	32,941,061	47,052,935	7,073,912 49	21.47	15.03	29.99	70.01
1883	16,495,198	38,652,045	55,147,243	8,148,267 67	21.08	14.78	29.91	70.09
1884	13,989,191	35,796,697	49,785,888	7,411,946 37	27.06	14.80	28.10	71.90
1885	15,919,254	31,231,947	47,151,201	6,624,100 39	21.21	14.05	33.76	66.24
1886	15,198,163	29,659,876	44,858,039	6,769,354 69	22.82	15.09	33.88	66.12

No. 95.—STATEMENT showing the QUANTITIES and VALUES of the Principal and other COMMODITIES IMPORTED into the DOMINION OF CANADA from the United States, taken from the Canadian accounts, as compared with the Domestic and Foreign EXPORTS from the UNITED STATES to the Dominion of Canada, taken from the United States accounts, for the Year ending June 30, 1886.

[Abbreviation: n. e. s., not elsewhere specified.]

ARTICLES.	Imports into the Dominion of Canada from the United States, taken from Canadian accounts.		Exports from the United States to the Dominion of Canada, taken from United States accounts.		Excess of imports according to Canadian accounts.		Excess of exports according to United States accounts.	
	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.
		Dollars.		*Dollars.*		*Dollars.*		*Dollars.*
AGRICULTURAL IMPLEMENTS:								
Horse-powers	....	1,179	....	675	....	504	....	....
Mowers and reapers, and parts of	....	27,626	....	3,113	....	24,513	....	....
Plows and cultivators, and parts of	....	6,940	....	5,540	....	1,400	....	....
All other, and parts of	....	104,657	....	112,164	....	....	....	7,507
ANIMALS:								
Cattle ..... No.	8,798	167,047	441	18,749	8,357	148,298	....	....
Hogs ..... No.	59,979	519,705	66,858	617,152	....	....	6,879	97,447
Horses ..... No.	3,032	270,539	661	106,565	2,371	163,974	....	....
Mules ..... No.	....	....	31	2,690	....	....	31	2,690
Sheep ..... No.	32,984	68,350	25,310	54,462	7,674	13,888	....	....
All other, and fowl	....	19,545	....	8,514	....	11,031	....	....
Art-works: Paintings and statuary	....	172,792	....	10,118	....	162,674	....	....
Bark, and extract of, for tanning	....	10,945	....	297	....	10,648	....	....
Billiard and pool tables and apparatus	....	3,017	....	1,913	....	1,104	....	....
Blacking	....	36,345	....	14,485	....	21,860	....	....
Bones, hoofs, horns, and horn tips, strips, and waste	....	8,696	....	1,790	....	6,906	....	....
Books, maps, engravings, and other printed matter	....	798,416	....	120,673	....	677,743	....	....
Brass, and manufactures of	....	298,760	....	44,506	....	254,254	....	....
BREADSTUFFS:								
Barley ..... bush..	8,134	5,497	31,637	22,973	....	....	23,503	17,476
Bread and biscuit ..... lbs..	487,676	22,855	434,505	19,651	53,171	3,204	....	....
Corn ..... bush..	4,528,878	2,242,348	5,461,389	2,308,135	....	....	932,511	65,787
Corn meal ..... bbls..	125,106	300,895	117,896	310,575	7,210	....	....	9,680
Oats ..... bush..	219,976	73,320	239,302	70,231	....	3,089	19,326	....
Oatmeal ..... lbs..	183,946	5,909	6,887,845	139,357	....	....	6,703,899	133,448
Rye ..... bush..	18	15	....	....	18	15	....	....
Rye-flour ..... bbls..	116	482	44	170	72	312	....	....
Wheat ..... bush..	2,373,207	2,229,758	2,507,495	2,069,000	....	160,758	134,288	....

No. 95.—MERCHANDISE IMPORTED into the DOMINION of CANADA from the UNITED STATES (CANADIAN ACCOUNTS), compared with the EXPORTS to the DOMINION of CANADA from the UNITED STATES (UNITED STATES ACCOUNTS), 1886—Continued.

ARTICLES.	Imports into the Dominion of Canada from the United States, taken from Canadian accounts.		Exports from the United States to the Dominion of Canada, taken from United States accounts.		Excess of imports according to Canadian accounts.		Excess of exports according to United States accounts.	
	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.
Breadstuffs—continued.		*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*
Wheat-flour ...... bbls..	213,439	834,156	383,092	1,688,356	....	....	169,653	854,200
All other breadstuffs, and preparations of, used as food	....	79,196	....	171,904	....	....	....	92,708
Bricks:								
Building ...... M..	813	4,158	1,307	5,100	....	....	494	942
Fire	....	36,251	....	31,615	....	4,636	....	....
Broom-corn	....	121,709	....	83,091	....	38,618	....	....
Brooms and brushes	....	39,972	....	32,074	....	7,898	....	....
Candles ...... lbs..	108,657	14,028	78,866	8,337	29,791	5,691	....	....
Carriages and horse-cars, and parts of	....	150,269	....	138,670	....	11,599	....	....
Cars, passengers and freight, for steam railroads	....	216,825	....	201,193	....	15,632	....	....
Casings for sausages	....	13,921	....	6,405	....	7,516	....	....
Chemicals, drugs, dyes, and medicines:								
Acids	....	32,043	....	7,106	....	24,937	....	....
Ashes, pot and pearl ...... lbs..	524,543	5,407	2,250	116	522,293	5,291	....	....
Dyes and dyestuffs	....	336,834	....	60,986	....	275,848	....	....
Medicines, patent or proprietary	....	162,189	....	10,502	....	151,687	....	....
Roots, herbs, and barks, n. e. s	....	7,494	....	982	....	6,512	....	....
All other	....	662,816	....	247,557	....	415,259	....	....
Clocks and watches:								
Clocks, and parts of	....	107,107	....	25,346	....	81,761	....	....
Watches, and parts of	....	280,468	....	14,550	....	265,918	....	....
Coal:								
Anthracite ...... tons..	1,010,875	4,095,966	642,531	2,564,340	377,344	1,531,626	....	....
Bituminous ...... tons..	883,848	2,527,807	298,688	751,953	585,160	1,775,854	....	....
Coffee, unground ...... lbs..	926,566	96,023	278,093	26,738	648,473	69,885	....	....
Coffee and cocoa, ground or prepared, and chocolate	....	34,971	....	18,061	....	16,910	....	....
Copper, and manufactures of:								
Ore ...... tons..	....	....	21	4,080	....	....	21	4,680
Ingots, bars, and old ...... lbs..	424,810	31,265	2,000	200	422,810	31,065	....	....
Sheets ...... lbs..	323,792	37,939	28,914	4,998	294,878	32,941	....	....
All other manufactures of	....	70,077	....	21,882	....	48,195	....	....
Cotton, and manufactures of:								
Unmanufactured—								
Other ...... lbs..	29,709,054	2,891,290	18,712,718	1,882,273	10,996,336	1,009,017	....	....
Manufactures of	....	1,198,322	....	821,664	....	376,658	....	....

EARTHEN, STONE, AND CHINA WARE:									
Earthen and stone ware			70, 819		68, 485		2, 334		
China ware			9, 872		9, 136		236		
Eggs	doz..	264, 167	44, 261	208, 079	30, 220	56, 088	8, 041		
FANCY ARTICLES:									
Perfumery and cosmetics			35, 636		9, 735		25, 901		
Toys			34, 800		5, 061		29, 739		
All other			329, 173		85, 504		243, 669		
Fertilizers	tons..		4, 816		8, 117				8, 301
FISH:									
Codfish, dried, smoked, and cured, including haddock, hake, and pollock	lbs..	580, 266	29, 151	93, 291	4, 283	486, 975	24, 868		
Mackerel, pickled	bbls..	273	1, 427	536	2, 776			263	1, 349
Salmon—									
Canned			571		24, 031				23, 460
Other			1, 825		404		1, 421		
Fish, fresh, n. e. s	lbs..	2, 094, 480	60, 675	853, 386	26, 205	1, 241, 094	34, 470		
Fish, dried, smoked, and cured, n. e. s.	lbs..	1, 918, 277	48, 870	597, 977	27, 948	1, 320, 300	20, 922		
Fish, pickled, n. e. s	bbls..	1, 105	3, 485	1, 230	5, 939			125	2, 454
Shell-fish—									
Oysters			272, 971		105, 323		167, 648		
Other			3, 125		25, 262				22, 137
Fish, all other			22, 476		966		21, 510		
FLAX, HEMP, AND JUTE, MANUFACTURES OF:									
Bags					11, 354				11, 354
Cordage	lbs..	742, 500	73, 688	284, 834	29, 999	457, 666	43, 689		
Twine			166, 056		38, 497		127, 559		
All other			261, 382		66, 863		194, 519		
FRUITS:									
Apples, dried	lbs..	223, 934	11, 834	108, 403	4, 651	115, 531	7, 183		
Apples, green or ripe	bbls..	31, 575	63, 775	13, 898	28, 744	17, 677	35, 031		
Fruits, preserved—									
Canned			34, 495		42, 612				8, 117
Other			2, 647		15, 753				13, 106
All other, green, ripe, or dried			525, 348		295, 421		229, 927		
Furs and skins			366, 317		128, 182		238, 135		
GLASS AND GLASSWARE:									
Window-glass			9. 257		823		8, 434		
All other			282, 419		260, 155		22, 264		
Glucose or grape-sugar	lbs..	823, 202	24. 327	74, 061	2, 078	749, 141	22, 249		
Glue	lbs..	443, 311	48, 873	121, 245	17, 862	322, 066	31, 011		
Grease, grease scraps, and all soap-stock			154, 473		141, 591		12, 882		
GUNPOWDER AND OTHER EXPLOSIVES:									
Gunpowder	lbs..	34, 674	4, 496	47, 520	6, 852			12, 846	2, 356
All other			33, 741		56, 683				22, 942
Hair, and manufactures of			51, 991		10, 736		41, 255		
Hay	tons..	814	6, 697	423	3, 646	391	3, 051		
Hides and skins, other than furs			1, 658, 769		368, 968		1, 289, 801		
Honey			1, 905		1, 634		271		
Hops	lbs..	203, 098	27, 578	161, 840	16, 843	41, 258	10, 735		
Ice			906		830		166		

No. 95.—MERCHANDISE IMPORTED into the DOMINION of CANADA from the UNITED STATES (CANADIAN ACCOUNTS), compare with the EXPORTS to the DOMINION of CANADA from the UNITED STATES (UNITED STATES ACCOUNTS), 1886—Continued.

ARTICLES.	Imports into the Dominion of Canada from the United States, taken from Canadian accounts.		Exports from the United States to the Dominion of Canada, taken from United States accounts.		Excess of imports according to Canadian accounts.		Excess of exports according to United States accounts.	
	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.
		Dollars.		*Dollars.*		*Dollars.*		*Dollars.*
INDIA-RUBBER AND GUTTA-PERCHA, MANUFACTURES OF:								
Crude ... lbs..	758,561	403,264			758,561	403,264		
Boots and shoes		192,671		38,705		153,966		
All other		307,758		100,470		207,288		
Ink, printers' and other		54,962		11,929		43,033		
Instruments and apparatus for scientific purposes, including telegraph, telephone, and other electric		106,641		21,061		85,580		
IRON AND STEEL, AND MANUFACTURES OF:								
Iron ore ... tons..			561	1,122			561	1,122
Pig-iron ... tons..	11,242	216,957	7,268	137,839	3,974	79,118		
Band, hoop, and scroll iron ... lbs..	428,064	12,058	20,979	1,540	407,085	10,518		
Bar-iron ... lbs..	1,400,000	28,097	368,792	8,819	1,031,208	19,278		
Car-wheels		5,734		1,201		4,533		
Castings, n. e. s		240,152		91,977		148,175		
Cutlery		44,840		3,593		41,247		
Fire-arms		55,643		21,467		34,176		
Ingots, bars, and rods of steel ... bls..	2,278,416	73,663	108,858	4,379	2,169,558	69,284		
Locks, hinges, and other builders' hardware		558,878		316,457		242,421		
Machinery, n. e. s		923,805		369,533		554,272		
Nails and spikes ... lbs..	410,223	16,417	235,639	7,547	174,584	8,870		
Plates and sheets—								
Of iron ... lbs..	5,087,928	166,582	2,040,969	71,375	3,046,959	95,207		
Of steel ... lbs..	609,288	27,107	806	161	608,482	26,946		
Printing presses and parts of		77,378		19,768		57,610		
Railroad bars or rails—								
Of iron ... tons..	34	4,104	98	2,745		1,359	64	
Of steel ... tons..	1,498	93,830	2,460	117,063			962	23,233
Saws and tools		248,620		29,122		219,498		
Scales and balances		25,247		24,831		416		
Sewing-machines, and parts of		146,463		108,245		38,218		
Steam-engines, and parts of—								
Fire-engines ... No..	3	3,442			3	3,442		
Locomotive engines ... No..	26	176,936	7	39,472	19	136,464		
Stationery engines ... No..	9	6,941	3	800	6	6,141		
Boilers and parts of engines		25,240		5,926		19,314		
Stoves and ranges, and parts of		22,570		13,818		8,757		

Wire ... lbs.	3,193,590	128,116	256,859	12,082	2,936,731	116,084		
All other manufactures of iron and steel		736,824		484,197		252,627		
Jewelry, and manufactures of gold and silver		345,492		88,901		256,591		
Lamps, chandeliers, and all devices and appliances for illuminating purposes		190,582		20,878		163,704		
Lead, and manufactures of		14,308		13,096		1,207		
LEATHER, AND MANUFACTURES OF:								
Leather—								
Buff, grain, splits, and all finished upper-leather		131,439		44,481		96,968		
Patent or enameled		14,465				14,465		
Sole ... lbs.	803,175	195,500	19,019	5,017	784,156	190,483		
All other		176,730		112,371		64,359		
Manufactures of—								
Boots and shoes ... pairs.	171,288	164,901	29,028	49,471	142,260	115,520		
Harness and saddles		27,983		49,339				21,856
All other		136,311		70,545		65,766		
Lime and cement		24,866		26,852				1,986
MALT LIQUORS:								
In bottles ... doz.	3,721	6,868	5,938	8,978			2,217	2,110
Not in bottles ... galls.	116,493	23,500	130,261	33,407			18,768	9,907
MARBLE AND STONE, AND MANUFACTURES OF:								
Unmanufactured		126,923		139,314				12,391
Manufactures of—								
Roofing-slate		1,798		2,406				608
All other		90,684		87,772		2,912		
Matches				555				555
MUSICAL INSTRUMENTS:								
Organs ... No.	360	21,053	255	24,747	105			3,694
Piano-fortes ... No.	1,010	233,479	536	147,987	474	85,492		
All other, and parts of		83,801		12,896		70,905		
NAVAL STORES:								
Rosin ... bbls.	19,796	91,559	16,470	29,336	3,826	62,229		
Tar, turpentine, and pitch ... bbls.	4,481	9,412	10,028	28,580			5,547	19,118
Oakum ... lbs.	484,512	18,221	98,432	5,170	386,080	3,051		
Oil cake and oil-cake meal ... lbs.	1,270,640	14,120	430,132	7,663	840,508	6,457		
OILS:								
Animal—								
Lard ... galls.	22,625	12,009	23,432	10,909		1,100	807	
Sperm ... galls.			61	32			61	32
Whale and fish ... galls.	27,708	10,792	12,399	10,035	15,309	757		
Other ... galls.	13,392	6,468	4,968	1,470	8,474	4,998		
Mineral, crude (including all natural oils, without regard to gravity ... galls.			202	20			202	20
Mineral, refined or manufactured—								
Illuminating ... galls.	4,208,794	481,104	8,316,249	382,755	892,545	98,849		
Lubricating and heavy paraffine oil ... galls.	451,859	131,694	384,697	96,921	67,162	34,778		
Residuum (including tar, and all other, from which the light bodies have been distilled ... bbls.			53	198			53	198
Vegetable:								
Cotton-seed ... galls.			948	861			948	861
Linseed ... galls.	22,506	9,058	7,335	3,458	15,171	5,600		
Volatile or essential		30,564		1,255		29,309		
Other		103,489		15,689		87,800		
Paints and painters' colors		163,800		58,258		110,042		

No. 95.—MERCHANDISE IMPORTED into the DOMINION of CANADA from the UNITED STATES (CANADIAN ACCOUNTS), compared with the EXPORTS to the DOMINION OF CANADA from the UNITED STATES (UNITED STATES ACCOUNTS,) 1886—Continued.

ARTICLES.	Imports into the Dominion of Canada from the United States, taken from Canadian accounts.		Exports from the United States to the Dominion of Canada, taken from United States accounts.		Excess of imports according to Canadian accounts.		Excess of exports according to United States accounts.	
	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.
		Dollars.		*Dollars.*		*Dollars.*		*Dollars.*
PAPER, AND MANUFACTURES OF:								
Paper-hangings		199, 690		28, 082		171, 608		
Writing-paper and envelopes				20, 752				20, 752
All other		440, 417		104, 727		335, 690		
Paraffine, and paraffine wax lbs.	61, 187	7, 675	1, 875	227	59, 312	7, 448		
Plated ware		137, 762		20, 048		117, 714		
PROVISIONS (comprising meat and dairy products):								
Meat products—								
Beef products—								
Beef, canned		50, 690		97, 257				46, 567
Beef, fresh lbs.	9, 931	634	2, 158, 811	200, 716			2, 148, 880	200, 082
Beef, salted or pickled lbs.	2, 412, 329	111, 053	24, 973, 118	1, 462, 492			22, 560, 789	1, 351, 439
Beef, other cured lbs.			43, 319	3, 912			48, 319	3, 912
Tallow lbs.	129, 071	6, 896	117, 203	4, 652	11, 868	2, 244		
Mutton lbs.	139, 119	7, 136	141, 506	6, 745		391	2, 387	
Oleomargarine—								
Imitation butter lbs.			38, 564	4, 535			38, 564	4, 535
Pork produts—								
Bacon and hams lbs.	3, 566, 931	284, 987	7, 191, 384	595, 657			3, 624, 453	310, 670
Pork, fresh lbs.	159, 700	6, 811	68, 696	3, 781	91, 004	3, 030		
Pork, salted or cured lbs.	15, 872, 627	713, 779	26, 957, 032	1, 552, 714			11, 084, 405	838, 935
Lard lbs.	3, 859, 045	255, 785	7, 855, 891	495, 460			3, 996, 316	239, 675
Poultry and game		12, 618		3, 918		8, 700		
All other products		22, 675		20, 001		2, 674		
Dairy products—								
Butter lbs.	1, 249, 090	207, 034	2, 132, 424	825, 467			883, 334	118, 483
Cheese lbs.	7, 051, 472	532, 650	8, 374, 567	655, 653			1, 323, 095	123, 003
Milk				9, 277				9, 277
Quicksilver lbs.	10, 670	5, 923	8, 509	3, 666	2, 161	2, 257		
Rags lbs.	10, 565, 978	164, 363	1, 588, 740	23, 122	8, 977, 238	141, 241		
Rice lbs.	652, 215	16, 750	625, 805	12, 516	26, 410	4, 234		
Salt lbs.	6, 312, 549	14, 016	1, 904, 798	6, 446	4, 407, 751	7, 570		
SEEDS:								
Clover lbs.			1, 481, 462	141, 132			1, 481, 462	141, 182
Timothy lbs.			2, 649, 709	109, 584			2, 649, 709	109, 584
All other		330, 459		97, 596		232, 863		

Silk, manufactures of			122,602		17,114		105,488		
Soap:									
Toilet or fancy			47,067		13,388		33,679		
All other	lbs	872,871	59,096	454,106	23,250	418,765	35,846		
Spices, ground and unground			84,946		9,761		75,185		
Spirits:									
Alcohol	proof galls			20	48			20	48
Rum	proof galls	16,382	5,011	22,834	9,074			6,452	4,063
Whisky	proof galls	14,715	15,312	12,981	11,414	1,734	3,898		
All other	proof galls	16,288	16,480	11,244	13,175	5,044	3,305		
Spirits of turpentine	galls	350,995	147,225	93,573	34,848	257,422	112,377		
Starch	lbs	343,222	17,948	72,687	4,004	270,585	13,944		
Stationery, except of paper			38,811		27,548		11,263		
Stereotype and electrotype plates					1,925				1,925
Straw and palm-leaf, manufactures of			240,594		6,731		233,863		
Sugar and molasses:									
Molasses and sirup	galls	85,092	12,584	141,277	31,782			56,185	19,198
Sugar, brown	lbs	8,444,013	244,464	10,604,224	283,421			2,160,211	38,957
Sugar, refined	lbs	1,989,028	116,118	3,030,853	187,479			1,041,825	71,361
Candy and confectionery			51,571		12,369		39,202		
Tea	lbs	2,042,114	347,932	2,733,761	462,849			691,647	114,917
Tin, and manufactures of			201,478		67,855		133,623		
Tobacco and manufactures of:									
Leaf	lbs	15,031,376	1,651,162	8,832,399	1,597,111	6,198,977	54,051		
Cigars and cigarettes			50,690		23,817		26,873		
All other manufactures of			64,001		46,679		17,322		
Trunks, valises, and traveling-bags			49,834		8,366		41,468		
Umbrellas, parasols, and sunshades			3,366		8		3,358		
Varnish	galls	42,060	77,483	9,476	11,868	32,584	65,615		
Vegetables:									
Onions	bush			8,567	6,734			8,567	6,734
Pease and beans	bush	10,815	13,908	11,984	10,170	3,738	1,169		
Potatoes	bush	58,307	26,709	43,872	16,754	14,435	9,955		
Vegetables, canned			24,454		14,172		10,282		
All other, including pickles			119,536		67,350		52,186		
Vessels sold to foreigners:									
Sailing-vessels	tons		a 39,773		1,390		38,383		
Vinegar	galls	7,268	1,469	5,341	1,027	1,927	442		
Wax, bees'	lbs		15,467		1,287		14,180		
Whalebone	lbs	1,456	3,077			1,456	3,077		
Wine:									
In bottles	doz	1,041	12,168	813	8,920	228	3,248		
Not in bottles	galls	10,385	12,046	14,659	12,059			4,274	13
Wood, and manufactures of:									
Firewood	cords	1,373	5,577	2,677	8,342			1,304	2,765
Lumber—									
Boards, deals, and planks	M feet	8,128	299,593	25,401	536,736			17,273	237,143
Joists and scantling	M feet			874	4,430			874	4,430
Hoops and hoop-poles					45				45
Laths	M			617	810			617	810
Paling, pickets, and bed-slats	M			13	109			13	109
Shingles	M	12,497	15,155	10,819	14,299	1,678	856		

No. 95.—MERCHANDISE IMPORTED into the DOMINION of CANADA from the UNITED STATES (CANADIAN ACCOUNTS), compared with the EXPORTS to the DOMINION of CANADA from the UNITED STATES (UNITED STATES ACCOUNTS), 1886—Continued.

ARTICLES.	Imports into the Dominion of Canada from the United States, taken from Canadian accounts.		Exports from the United States to the Dominion of Canada, taken from United States accounts.		Excess of imports according to Canadian accounts.		Excess of exports according to United States accounts.	
	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.
WOOD AND MANUFACTURES OF—continued.		*Dollars.*		*Dollars.*		*Dollars.*		*Dollars.*
Lumber—Continued.								
Shooks—								
Box	....	....	....	44	....	....	....	44
Staves and headings	....	....	....	80,521	....	....	....	80,521
All other lumber	....	440,883	....	26,706	....	414,177	....	....
Timber—								
Sawed ... M feet	....	....	7,410	154,151	....	....	7,410	154,151
Hewed ... cubic feet	....	....	1,290,314	362,145	....	....	1,290,314	362,145
Logs, and other timber	....	505,027	....	102,637	....	402,390	....	....
Manufactures of—								
Doors, sash, and blinds	....	....	....	16,215	....	....	....	16,215
Moldings, trimmings, and other house-finishings	....	20,489	....	11,174	....	9,315	....	....
Hogsheads and barrels, empty	....	142,846	....	7,989	....	134,857	....	....
Household furniture	....	164,920	....	412,099	....	....	....	247,170
Wooden-ware	....	30,741	....	27,643	....	3,098	....	....
All other	....	578,798	....	233,660	....	345,138	....	....
WOOL, AND MANUFACTURES OF:								
Wool, raw ... lbs	4,223,232	597,392	5,716,064	896,528	....	....	1,492,832	299,136
Carpets ... yards	16,944	9,171	1,902	2,131	15,042	7,040	....	....
Flannels and blankets	....	1,981	....	1,978	....	3	....	....
Wearing-apparel	....	35,314	....	195,660	....	....	....	160,346
All other manufactures of	....	123,784	....	158,284	....	....	....	34,500
ZINC, AND MANUFACTURES OF:								
Pigs, bars, plates, and sheets ... lbs	256,704	10,446	89,369	6,276	167,335	4,170	....	....
All other manufactures of	....	6,829	....	5,163	....	1,666	....	....
ALL ARTICLES NOT ELSEWHERE ENUMERATED:								
Unmanufactured articles	....	922,867	....	284,814	....	638,053	....	....
Manufactured articles	....	2,584,012	....	347,719	....	2,236,293	....	....
TOTAL VALUE MERCHANDISE	....	48,451,011	....	33,462,800	....	14,988,211	....	....
TOTAL VALUE OF GOLD AND SILVER COIN AND BULLION	....	2,039,664	....	1,136,850	....	902,814	....	....
TOTAL VALUE OF MERCHANDISE, COIN, AND BULLION	....	50,490,675	....	34,599,650	....	15,891,025	....	....

a Including repairs on.

No. 96.—STATEMENT showing the movement of GOLD and SILVER COIN and BULLION between the UNITED STATES and the DOMINION of CANADA during each Year ending June 30, 1883, 1884, 1885, and 1886, as shown by the Canadian and the United States accounts of imports and exports.

COIN AND BULLION.	IMPORTS FROM CANADA.		EXPORTS TO CANADA.	
	Per Canadian accounts of exports.	Per United States accounts of imports.	Per Canadian accounts of imports.	Per United States accounts of exports.
1883.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Gold:				
Coin	631, 600	3, 700, 779	885, 138	1, 640, 000
Bullion		567, 412		....
Silver:				
Coin		....		....
Bullion		11, 575		3, 130
Total	631, 600	4, 279, 566	885, 138	1, 643, 130
In cars, &c	(*)	3, 639, 562	(*)	1, 643, 130
1884.				
Gold:				
Coin	* 2, 183, 702	2, 079, 790	706, 938	700, 000
Bullion		616, 403		....
Silver:				
Coin		890		607
Bullion		....		....
Total	2, 183, 702	2, 696, 583	706, 938	700, 607
In cars, &c	(*)	2, 066, 800	(*)	700, 000
1885.				
Gold:				
Coin	2, 021, 266	491, 578	1, 574, 691	575, 000
Bullion		584, 082		....
Silver:				
Coin		20		3, 600
Bullion		....		....
Total	2, 021, 266	1, 075, 680	1, 574, 691	578, 600
In cars, &c	(*)	480, 193	(*)	578, 500
1885.				
Total:				
Province of Ontario	....	456, 243	201, 429	578, 600
Province of Quebec	2, 018, 266		1, 373, 029	
Province of Manitoba	....		233	
Province of Nova Scotia	3, 000	23, 950	....	....
Province of New Brunswick	....		....	....
Province of British Columbia	....	595, 487	....	....
	2, 021, 266	1, 075, 680	1, 574, 691	578, 600
1886.				
Gold:				
Coin	50, 100	107, 124	2, 039, 664	1, 130, 000
Bullion		687, 705		....
Silver:				
Coin		8, 116		6, 850
Bullion		1, 827		....
Total	50, 100	804, 772	2, 039, 664	1, 136, 850
In cars, &c	(*)	185, 268	(*)	1, 136, 850

* Not stated.

No. 96.—MOVEMENT of GOLD and SILVER COIN and BULLION between the UNITED STATES and the DOMINION of CANADA, &c., 1883 to 1886—Continued.

COIN AND BULLION.	IMPORTS FROM CANADA.		EXPORTS TO CANADA.	
	Per Canadian accounts of exports.	Per United States accounts of imports,	Per Canadian accounts of imports.	Per United States accounts of exports.
1886:				
Total:	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Province of Ontario	100	16,718	239,220	1,136,850
Province of Quebec	....		1,790,332	
Province of Manitoba	....		100	
Province of Nova Scotia	50,000	168,550	12	....
Province of New Brunswick	....		10,000	
Province of British Columbia	....	619,504	....	....
	50,100	804,772	2,039,664	1,136,850

See also tables Nos. 52, 55, 56, 57, 67, 68, and 69 in this Quarterly, No. 2, 1886-'87. for information relating to the Dominion of Canada.

Wm. F. Switzler.

Chief of Bureau

TREASURY DEPARTMENT,
Bureau of Statistics, March 9, 1887.

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WALES.

V.

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h as it is better adapted to
roperties. The lower beds
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COMMERCE, MANUFACTURES, ETC.

No. 78.—May, 1887.

COAL MINES OF NEW SOUTH WALES.

REPORT OF CONSUL GRIFFIN.

The coal mines of New South Wales are by far the most important in the southern hemisphere. The mineral is of such excellent quality and the seams are so extensive and easily worked that we may well stand amazed at the promise of their future. The total area covered by the seams is estimated at 23,950 square miles. They extend from the twenty-ninth to the thirty-sixth parallel of south latitude and penetrate to the water's edge along many miles of the sea-coast. Mr. Keene, the late examiner of the coal-fields of this colony, traced the seams 700 miles north of the deposits near Newcastle, and found them covered and underlaid with the same fossil flora and fauna characteristic of the Newcastle district. He is fully satisfied that these deposits are amongst the most extensive and valuable in the world. In fact, some of the highest authorities on minerals, both in England and Australia, are very decided in the opinion that the New South Wales coal in many respects is superior to English coal, inasmuch as it is better adapted to steam purposes and richer in gas-giving properties. The lower beds of the coal series of this colony are said by geologists to be older than any worked in Europe, and the upper beds represent the most recent of the European true Carboniferous formations. It has been noticed that all the New South Wales seams, from the Silurian upwards, are uniform in their deposits, and this fact has led to the conclusion that this portion of the globe was comparatively free from violent eruptions and disturbances from the Silurian to the Permian period, and that the alternate submergences and elevations of the land were slow and gradual.

There are very few workable coal seams in the colony of Victoria, but the mineral exists in considerable quantities in other portions of Australasia, especially in Queensland and New Zealand. During the year 1885 the output of the Queensland mines was more than double that of 1884, but the combined products of the whole of the Australasian group are insignificant when compared with those of New South Wales. The government authorities have divided the coal-fields of New South Water into three districts, the northern, southern, and western.

THE NORTHERN DISTRICT.

The northern district produces not only the best coal but the greatest quantity. The famous Hunter River and Newcastle mines belong to that district. The shipping facilities at Newcastle are extraordinary, the tonnage of the port being at times as large as that of Sydney, the metropolitan city of Australasia.

Newcastle, which contains a population of about 30,000, is situated 75 miles north of Sydney, on the left bank of the Hunter River, at its mouth, which indeed forms the harbor of the port. The public buildings possess many and varied attractions. The custom-house, post-office, market building, and hospital, the churches, &c., are constructed in the most approved style of architecture, and show the taste and wealth of the inhabitants. Vast sums have been expended in the last few years in improving the harbor. The depth of water on the shores is 22 feet.

The machinery used for loading vessels with coal is of very high order. It consists of 7 steam cranes and 4 shoots, belonging to the government, and 5 cranes belonging to the Australian Agricultural Company, and 2 belonging to the Newcastle Company. These cranes have a loading capacity of from 12,000 to 14,000 tons per day. The cranes at Bullock Island Dock have a capacity of 6,000 tons daily. Those erected on the wharf formed by the dike comprise 2 of 25 tons each and 6 of 15 tons each. As much as 250 tons of coal have been put aboard ship at Newcastle in sixty-six minutes.

A branch line with a viaduct over Thorsby's Creek connects the wharves at Bullock Island with the Great Northern Railway.

Naval-defense works have been constructed for the purpose of protecting the port in time of war. The fort at Flagstaff Hill, commanding the harbor, has three 9 inch guns and four rifled 80-pounders.

The quantity of coal produced in the northern district is about 2,350,000 tons per annum, more than two-thirds of the total coal product of the colony. In 1886 the output of the northern mines amounted to 2,415,112 tons. In 1885 there were 2.113,372 tons against 453.372 tons for the southern district and 311,762 tons for the western. The mines in the northern district are practically inexhaustible, and it is estimated that at the present rate of consumption they will last for the next seven hundred years.

The publication of the last report of the royal commission on the New castle collieries reveals many interesting facts in connection with the northern mines. The report is a very voluminous one and contains 181 closely printed pages. The following collieries were examined by the commission: Stevenson's, Broughall and Griffiths, Maryville, Wickham, Bullock Island, Hetton, Stockton, Australian Agricultural Company's No. 2 pit, Newcastle Coal Mining Company's pit B, Burwood borings on Stockton peninsula, and, lastly the surface of Spennymore and other collieries on Tighe's Hill.

The commission was composed of gentlemen of large experience in coal mining, and especially in this colony. They examined as many as forty-five witnesses, and their testimony comprises one of the most valuable and interesting features in the report. The commission gave great attention, not only to the present condition of the mines, but to their prospective workings under the waters of the harbor or the Pacific Ocean. Very careful investigations were made as to the character of the strata shafts and underground workings in collieries some miles distant from the harbor but adjoining the Pacific Ocean. The area embraced measures from north to south 7½ miles, and from east to west 4 miles, and comprises portions of the parishes of Kahiba on the south and of Newcastle on the north. The report, after mentioning that the district is overlaid with rocks belonging to the lower Coal Measures, states that the Newcastle seam, the lowest workable coal of this series of Carboniferous rocks, as well as the higher and superimposed coal seams, once covered the whole area under review, and which at a subsequent period was denuded in certain portions by the action of the atmosphere, rain, frost, or running water at a time when the relative height of the land to that of the ocean was different from what it now is. The alteration in the relative position of the land and water may have been caused by the changes in the earth's ecliptic, probably arising from the effects of climate near the poles, or, it may be, but less likely, from the volcanic forces with which the vast insular continent of Australia was assailed during post-Tertiary, or, geologically considered, in comparatively recent times.

QUALITY OF THE NORTH DISTRICT COAL.

The northern coals are pure bituminous coals, with strong coking properties. They contain much less ash than those from the southern and western districts, although it is said that many engineers in the British navy and in the merchant-marine service prefer the semi-bituminous coal to the northern, because the disadvantage of the greater proportion of ash in the former is counterbalanced by the fact that it burns more evenly and uniformly than the other; moreover, it does not so readily form into clinkers; but when it is required to get up steam rapidly the northern coal is preferred.

Mr. W. A. Dixon, F. C. S., of the School of Arts, of this city, made a series of analyses of the various coals of the world for the International Exhibition at Sydney, and perhaps a better idea ot the character of the New South Wales coals can be formed from his investigations than from any other source. In the work he had in hand he followed the calculation given by Percy, which divides all the different kinds of coal into anthracite, bituminous, and hydrous coals. Mr. Dixon had also in mind the conditions laid down by the commission appointed by the Admiralty to investigate the British coals for the purpose of the navy, one of which was that coal should not progressively decay, for in so doing it becomes liable to spontaneous combustion. Another condition was that it should possess considerable cohesion of its particles, so as not to break into small fragments by constant attrition in the vessel. Another point was that it should have considerable density. Mr. Dixon showed by comparison that the coal from Newcastle, New South Wales, is much denser than the English Newcastle and very nearly equal to the best Welsh coal.

I am indebted to Mr. Dixon for the following table, showing the comparative specific gravity and percentage of sulphur, ash, and volatile hydrocarbons in New South Wales and British coals:

Average analyses.

Coals.	Number of samples.	Specific gravity.	Sulphur.	Ash.	Volatile hydrocarbons.
Newcastle, New South Wales	14	1.311	0.91	4.97	37.55
Western New South Wales	9	1.347	1.03	10 31	30.42
Southern New South Wales	7	1.374	0.65	10.25	20.84
Newcastle, England	17	1.246	1.24	3.82	36.44
Derbyshire, England	8	1.284	1.06	2.54	39.12
Lancashire, England	28	1.279	1.37	4.64	40.61
Welsh	31	1.318	1.34	4.15	21.15

According to this table a ton of New South Wales coal would occupy nearly 6 per cent. less space than an equal quantity of British coal. Mr. Dixon states that New South Wales coal contains less sulphur than the British, and consequently is not so liable to spontaneous combustion or to affect the purity of the atmosphere.

The following tables, prepared by Mr. Dixon, show the component parts of various samples of coal in the northern district:

No. 1.—*Sample of coal from the Australian Agricultural Company's mine at Newcastle*

Specific gravity	1.286

Proximate analysis.

Water	1.65
Volatile hydrocarbons	35.45
Fixed carbons	57.84
Ash	4.44
Sulphur	0.62
	100.00

Coke: 63.28 per cent. Ash: Reddish.

Analysis of ash.

Alumina	22.84
Ferric oxide	15.20
Lime	1.98
Sulphuric oxide	.97
Phosphoric oxide	2.26
Alumina	3.45
Ferric oxide	trace
Silica	53.10
Undetermined and loss	.20
	100.00

No. 2.

Percentage of organic matter and water	9.97

Analysis of residue.

Alumina	6.68
Ferric oxide	2.77
Lime	.42
Magnesia	1.32
Sulphuric oxide	.21

Phosphoric oxide	.41
Chlorine	trace
Alumina	12.31
Silica	75.56
Undetermined and loss	.32
	100.00

No. 3.—*Clarence River.*

Analysis of ash.

Alumina	22.78	Soluble in acid, 29.70.
Ferric oxide	4.01	
Lime	1.26	
Magnesia	.48	
Sulphuric oxide	.21	
Phosphoric oxide	.96	
Alumina	5.13	Insoluble in acid, 70.25.
Silica	65.12	
Undetermined and loss	.05	
	100.00	

No. 4.—*Ferndale colliery, Tighe's Hill.*

Specific gravity	1.296

Proximate analysis.

Water	2.10
Volatile hydrocarbons	36.22
Fixed carbon	57.24
Ash	3.84
Sulphur	.60
	100.00

Coke: 61.08 per cent. Ash: Buff-colored.

Analysis of ash.

Alumina	23.24	Soluble in acid, 38.96.
Ferric oxide	9.21	
Lime	2.41	
Magnesia	2.11	
Sulphuric oxide	.74	
Phosphoric oxide	1.25	
Alumina	6.42	Insoluble in acid, 61.14.
Ferric oxide	3.44	
Lime	.24	
Magnesia	.23	
Silica	50.81	
	100.00	

No. 5.—*Lake McQuarie.*

A bright bituminous coal.

Specific gravity	1.374

Proximate analysis.

Water	2.31
Volatile hydrocarbons	31.95
Fixed carbons	53.88
Ash	11.12
Sulphur	.74
	100.00

The coke produced was hard. Ash: Grayish-white.

No. 6.—*Minmi colliery, Newcastle.*

Bituminous, bright, with a few narrow dull streaks.

Specific gravity	1.28

Proximate analysis.

Moisture	2.59
Volatile hydrocarbons	33.87
Fixed carbon	56.49
Ash	5.61
Sulphur	1.44
	100.00

Coke: 62.10 per cent.; coke bright, dense, with fused appearance, little swollen. Ash: Reddish, somewhat fusible.

No. 7.—*Newcastle Coal Company, Glebe, Newcastle.*

Specific gravity	1.283

Proximate analysis.

Water	2.14
Volatile hydrocarbons	33.36
Fixed carbon	59.16
Ash	4.76
Sulphur	.58
	100.00

Coke: 63.92 per cent. Ash: Buff-colored.

Analysis of ash.

Alumina	27.21	Soluble in acid, 43.30.
Ferric oxide	11.11	
Lime	1.46	
Magnesia	1.56	
Sulphuric oxide	.72	
Phosphoric oxide	1.24	
Alumina	6.51	Insoluble in acid, 56.34.
Ferric oxide	3.02	
Lime	.61	
Magnesia	.63	
Silica	45.57	
Undetermined and loss	.36	
	100.00	

No. 8.—*New Lambton mine.*

Specific gravity	1.291

Proximate analysis.

Water	2.61
Volatile hydrocarbons	30.62
Fixed carbon	59.56
Ash	6.72
Sulphur	.49
	100.00

Coke: 66.28 per cent. Ash: Reddish-colored.

SOUTHERN DISTRICT.

The southern coals are of a much duller luster than the northern, and their structure is not so laminated. They do not coke in an ordinary fire, but will do so if treated in an oven. It has been predicted that the mines of this district will become in the near future as important as those of the north. The southern coal is well adapted both for steam and household purposes. Several of the seams extend over a distance of 50 miles. There are five seams at Mount Kembla. The lowest is

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above the level of the plain, and the others lie superimposed at convenient distances above each other and cropping to the surface. These seams vary in thickness from 4 feet to 17 feet 6 inches. The mine at Mount Keira is worked at an elevation of 500 feet above the level of the sea. The seam descends gradually until it reaches almost to the level of the ocean at Coal Cliff. The mine at the latter place is a very valuable one; coal can be put almost immediately from the mouth of the tunnel there into the bunkers of the vessels.

The method of working at Mount Pleasant is simple and inexpensive. No steam machinery is required. The coal is run down from the mountain by means of revolving drums and wire ropes.

Wollongong, the sea-port of this district, is the third in rank in the colony. It is situated about 64 miles from Sydney. The harbor has been greatly improved by the construction of a breakwater, and excavations out of solid rock to a depth of 18 feet, and by other improvements, such as the drainage of the old basin. The area of the new basins, which now form one, is about 3 acres. The district in which the mines are situated is noted for its fine wheat and dairy farms. The average price of land in the district is about £20 ($97.33) per acre. The farmers in this district have always complained of a scarcity of labor.

The subjoined table shows the component parts, specific gravity, of samples of coal from the southern district:

Locality.	Specific gravity.	Composition per cent., exclusive of water only.						Water, per cent.	Coke, per cent.	Calorific intensity (calculated).	Water converted into steam by 1 pound coal with calorimeter.
		Carbon.	Hydrogen.	Oxygen.	Nitrogen.	Sulphur.	Ash.				
Nattai	......	91.24	3.60	0.59	......	trace	4.56	3.28	92.37	8,590	Undet.
Mount Kembla	1.363	80.67	5.30	1.58	0.70	0.87	10.88	1.50	......	8,276	13.21
Mount Keira	1.379	78.82	5.17	2.87	1.33	1.00	9.81	1.15	74.35	7,983	12.92
Berrima	1.364	69.93	4.55	13.09	0.56	1.30	10.58	1.70	64.24	6,653	11.82
Bulli (R. Smith)	1.471	76.35	4.75	5.04	......	0.55	13.31	1.03	74.78	....	12.21
Mean	1.394	79.401	4.675	4.833	0.52	0.74	9.829	1.733	76.436	7,875	12.54

THE WESTERN DISTRICT.

The western coals are much drier than those of the southern district, and contain considerable volatile matter. Mr. Dixon does not think that they will ever be exported in large quantities. He says, however, that they will answer for local purposes quite as well as many coals worked in Great Britain and France. Mr. Dixon examined nine samples of western coals for the International Exhibition, with the following results:

Table showing the average composition of western coals from nine analyses made by Mr. W. A. Dixon, F. C. S.

Constituents.	Average.	Highest.	Lowest.
Specific gravity	1.347	1.400	1.336
Water	2.290	2.900	1.950
Volatile matter	30.420	35.020	25.840
Fixed carbon	55.940	64.340	49.970
Ash	10.310	12.010	9.260
Sulphur	1.310	1.750	0.570

It was noticed that the ash in western coals was white and dense. In the northern samples it is often buff and red tinted.

From a series of analyses made by Professor Liversedge, of the Sydney University, I learn that the amount of ash in the coals from the northern district was 2.70 to 8.82 per cent., or upon an average of 5.41 per cent.; southern district from 4.41 to 13.52 per cent., average 10.02; western district from 6.88 to 12.91 per cent., average 9.87 per cent. ash. The subjoined tables by Mr. Dixon show the analysis of samples of coal in the western district:

No. 1.

Specific gravity	1.329

Proximate analysis.

Water	2.70
Volatile hydrocarbons	28.78
Fixed carbon	57.88
Ash	9.88
Sulphur	.76
	100.00

Ash: Gray.

Analysis of ash.

Alumina	21.13	Soluble in acid, 24.62
Ferric oxide	1.39	
Lime	.78	
Magnesia	.61	
Sulphuric oxide	.16	
Phosphoric oxide	.55	
Alumina	14.21	Insoluble in acid, 75.23
Magnesia	trace	
Silica	61.02	
Undetermined and loss	.15	
	100.00	

No. 2.—*A sample of the whole thickness of a four-foot seam at Katoomba.*

It consists of a mixture of a bituminous and splint coal, with bright and dull colored pieces.

Specific gravity	1.343

Proximate analysis.

Moisture	2.71
Volatile hydrocarbons	25.31
Fixed carbon	60.90
Ash	10.84
Sulphur	.24
	100.00

The coke is dense, scarcely swollen, but fairly lustrous; the ash is white. This is a fairly good coal, the low percentage of sulphur being particularly noteworthy.

Analysis of ash.

Alumina	35.26	Soluble in acid, 37.10
Ferric oxide	.98	
Lime	traces	
Magnesia	.30	
Phosphoric oxide	.56	
Alumina	3.23	Insoluble in acid, 62.81
Silica	59.58	
Undetermined and loss	.09	
	100.00	

No. 3.—*Lithgow Valley colliery.*

Specific gravity	1.340

Proximate analysis.

Water	2.24
Volatile hydrocarbons	28.48
Fixed carbon	58.80
Ash	9.68
Sulphur	.80
	100.00

Ash: Grayish-white.

Analysis of ash.

Alumina	20.24	Soluble in acid, 23.72
Ferric oxide	1.42	
Lime	.74	
Magnesia	.57	
Sulphuric oxide	.11	
Phosphoric oxide	.64	
Alumina	16.02	Insoluble in acid, 76.23
Silica	60.21	
Undetermined and loss	.05	
	100.00	

Other samples of coal from this district have been examined with fully as favorable results. At Wallerawang (western district), 105 miles from Sydney, good coal, hard and compact, has been found. One sample from a seam 17½ feet thick yielded upon analysis 55.74 per cent. of fixed carbon, 33.24 volatile hydrocarbon, water 1.51, and ash 9.50 per cent.; specific gravity, 1.333; coke, 62.25.

Above the lowest seam was one of 6 feet 6 inches, and several others varying from 3 to 4 feet in thickness. There are extensive strata of limestone in the same district. They occur at the junction of the Coal Measures with Upper Silurian or Devonian beds, and consist of magnetite and brown hematite, as well as clay band ores, which are interstratified with the Coal Measures. The magnetite runs approximately northeast and northwest, and the magnetic effect is said to be so powerful as to render the compass useless in the neighborhood of the lode. The vein is 13 feet wide, the ore compact, and accompanied by silicious gangue. It yields about 41 per cent. of iron and is free from phosphorus and sulphur. The brown hematite vein has nearly the same direction as the above, and along the line of its outcrop great blocks of ore are scattered from 12 to 50 feet for nearly a mile. At a depth of 40 feet the vein is 18 to 20 feet thick, and the ore is composed of mammillated fibrous nodules. There are four seams of clay band which lie nearly horizontally, and crop out on both the east and west sides of the dividing range. The lowest is rather impure, but the others are good, containing from 49 to 56 per cent. of metal and very little sulphur or phosphorus. The seams average from 10 to 20 feet in thickness.

TOTAL OUTPUT.

The total output of all the coal mines in New South Wales during the year 1886 was 3,000,000 tons, valued at $7,064,427. The shale product or boghead mineral was 40,000 tons, valued at $85,000, and if it were added to the coal the total amount would be 3,040,000 tons, valued at $7,149,427. The New South Wales shale is said to be the best in the world. Its gas-illuminating power is equal to 43 standard candles, con-

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suming 5 cubic feet per hour. It is exported to the neighboring colonies and to San Francisco, where it is used in the manufacture of gas. Indeed its properties are so rich, that an addition of 5 per cent. to ordinary bituminous coal is all that is required to give gas made therefrom the requisite illuminating power.

Considerable quantities of this shale are consumed in the colony in the manufacture of kerosene by the process of slow distillation. The quantity of kerosene shale oil made from it during the year 1886 was 112,000 gallons against 96,000 gallons for 1885. This oil, while not as good as the American, is becoming popular here, partly because it is of home manufacture, and from the fact that it is sold at a lower price than that imported from the United States, upon which there is a duty of 6*d.* (12 cents) per gallon. This subject has, however, been treated at length by me in my special report on "Kerosene and Kerosene Shale," published in No. 60 of the Consular Reports.

The total output of the coal mines of New South Wales since the commencement of coal mining, in 1858, is estimated in the government returns at 35,723,274 tons. The quantity produced in 1858 was 216,397 tons, valued at $810,810. Of this 102,870 tons were used for home consumption; the remainder was exported. In 1868 the annual output had increased to 954,231 tons. In 1878 it was 1,575,497 tons; and in 1886, as previously stated, 3,000,000 tons. The quantity used for home consumption during 1886 was estimated at 1,300,000 tons.

Quantity and value of the output of the mines for each year from 1858 *to* 1886, *inclusive.*

Years.	Tons.	Value.	Years.	Tons.	Value.
1858	216,307	$810,810	1873	1,192,862	$3,328,735
1859	308,213	1,021,855	1874	1,304,612	3,951,320
1860	368,862	1,132,465	1875	1,329,729	4,097,145
1861	342,067	1,094,100	1876	1,319,918	4,016,500
1862	476,522	1,526,170	1877	1,444,271	4,294,990
1863	433,889	1,181,150	1878	1,575,497	4,604,680
1864	549,012	1,350,855	1879	1,583,381	4,754,390
1865	585,525	1,371,515	1880	1,466,180	3,076,680
1866	774,238	1,620,245	1881	1,769,597	3,016,240
1867	770,012	1,713,275	1882	2,109,282	4,744,825
1868	954,321	2,089,015	1883	2,521,457	6,009,705
1869	919,774	1,730,730	1884	2,749,100	6,515,880
1870	868,564	1,584,180	1885	2,878,863	6,701,060
1871	898,784	1,581,700	1886	3,000,000	7,064,427
1872	1,012,426	1,980,990			

The subjoined table shows the quantity and value of coal raised in each district for 1885:

District.	Quantity.	Value.
	Tons.	
Northern district	2,113,372	$5,164,970
Southern district	453,720	1,152.530
Western district	311,762	334,962
Total	2,878,854	6,652,462

The richest mine in the colony during the year proved to be that of the Newcastle Coal Mining Company, northern district, the product being 485,053 tons. The mines next in rank were the Wallsend, 394,604 tons; the Co-operative, 252,685 tons; the Lambton, 223,030 tons;

the Duckenfield, 215,723 tons; all in the same district. In the southern district the Mount Kembla mine produced 128,579 tons; the Osborn Wallsend, 108,579 tons. The next were Illawara, 99,841 tons, and Coal Cliff, 84.500 tons. The richest mines in the western district were the Lithgow Valley, 73,500 tons; Esk Bank, 67,615 tons; Zigzag, 60,000 tons, and Katomba, 40,000 tons.

The mine at Greta, northern district, is worked at a greater depth than any other in the colony, and that of the Agricultural Company comes next. The former is 450 feet, and the latter 303 feet in depth. Coal has, however, been found with the assistance of the diamond drill at a depth of several thousand feet. The greatest depth penetrated has been on the Sydney Coal Mining Company's property, near this city. Up to the 23d of January of the present year, 2,228 feet has been bored, and the bottom of the conglomerate was reached. Mr. C. S. Wilkinson the colonial geologist, and Mr. W. J. Slee, inspector of mines, were present at the withdrawal of the final tube, and it was found to contain as follows: One foot of coaly shale, a 3-inch band, 18 inches of semi-bituminous or bituminous and splint coal combined, and lastly shale and coal mixed, making in all about 4 feet of coaly shale and pure coal. Mr. Wilkinson is of the opinion that at a further depth of from 25 to 40 feet the main Carboniferous measure which runs through the district will be reached. The samples which have thus been unearthed are from the deepest coal deposit which has ever been reached in the southern hemisphere.

EXPORT OF COAL.

The total export of coal, from the opening of the mines in 1858 to the close of 1886, amounted to 22,428,585 tons, valued at $110,027,480. The exports for 1886 were 1,735,865 tons, valued at $4,735,010, against 1,756,356 tons, valued at $4,833,315, for 1885.

The following table shows the quantity and value of the coal exports from New South Wales for each year from 1876 to 1886, inclusive:

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	Tons.			*Tons.*	
1876	868, 817	$3, 126, 055	1882	1, 261, 545	$3, 235, 165
1877	915, 725	3, 244, 835	1883	1, 512, 445	4, 148, 310
1878	1, 006, 420	3, 542, 030	1884	1, 690, 763	4, 655, 225
1879	908, 049	3, 023, 535	1885	1, 756, 356	4, 833, 315
1880	753, 356	1, 126, 429	1886	1, 735, 865	4, 735, 010
1881	829, 844	2, 087, 650			

COUNTRIES WHITHER EXPORTED.

The greater part of the coal exported from New South Wales is consumed by the neighboring colonies. Out of the total exports for 1886 the colonies consumed 1,027,775 tons, valued at $2,724,120, Victoria receiving 640,655 tons, valued at $1,684,895; South Australia 140,623 tons, valued at $365,315; Tasmania 47,501 tons, valued at $130,165; New Zealand 175,217 tons, valued at $450,935; Queensland 22,053 tons, valued at $60,755; Western Australia 11,726 tons, valued at $32,055. In 1885 Victoria received 557,325 tons, South Australia 142,277, Tasmania 45,408, New Zealand 180,164, Queensland 52,341, and Western Australia 12,309 tons.

The following table shows in detail the quantity and value of coal exported to each place from New South Wales for each year from 1884 to 1886, inclusive:

Port.	Quantity.	Value.
1884.	*Tons.*	
Great Britain	5,000	$136,000
Victoria	519,385	2,317,000
South Australia	174,773	485,310
Tasmania	38,490	102,755
New Zealand	205,280	567,590
Queensland	39,776	108,810
Western Australia	16 383	49,245
South Sea Islands	6,406	21.020
New Caledonia	14,935	39,510
Fiji Islands	12.978	36,730
Hong-Kong	127,233	349,360
Calcutta	3,551	11,430
Bombay	4,051	11,140
Mauritius	16,612	47,605
Singapore	36,733	94,395
Ceylon	4,364	13,375
Tuticorin	3,241	8,665
Rangoon	11,822	34,480
Madras	8,672	10,235
Bassein	1,870	3,885
Guam	976	2,685
Mexico	2,890	7,935
Bangkok	1,694	4,660
Nagapatam	6,637	$18,930
Saigon (Cochin-China)	100	350
Eureka	699	2,970
Wilmington, Cal	32,506	106,190
Réunion	483	1,805
Panama	3,160	8,685
New Guinea	600	1,650
Padang	9,819	27,005
San Diego	871	2,395
Astoria	1,481	4,170
Petropaulovski	165	600
San Francisco	167,888	494,690
China	36,081	107,970
Chili	46,563	134,715
Honolulu	10,925	30,600
Java	62,415	173,580
Manila	40,410	110,815
Peru	7,346	21,645
Japan	1,942	5,305
Penang	3,100	8,925
Portland, Oreg	5,627	17,055
Total	1,690,736	5,620,970
1885.		
Victoria	557,825	1,455,805
South Australia	142,277	372,675
Tasmania	47,508	127,035
New Zealand	180,164	482,710
Queensland	52,341	145,525
Western Australia	12,309	33,465
South Sea Islands	4,919	15,455
New Caledonia	7,945	26,540
Fiji Islands	16,310	45,120
Hong-Kong	113,348	315,175
Calcutta	13,223	43,875
Bombay	18,439	51,505
Mauritius	7,763	21,680
Singapore	47,378	130,765
Ceylon	12,079	33,465
Tuticorin	2,858	775
1885—Continued.	*Tons.*	
Rangoon	10,243	$31,790
Madras	1,200	4,500
Bassein	3,260	9,340
Guam	10,251	28,390
Mexico	1,523	4,190
Bangkok	914	$2,510
Nagapatam	9,080	25,960
France	1,195	4,500
Eureka	1,422	4,260
Wilmington, Cal	31,695	101,120
Panama	2,118	5,795
New Guinea	700	1,960
Padang	506	1,390
San Diego	4,153	11,420
Burrard's Inlet	250	875
San Francisco	171,042	497,515
China	84,449	104,805
Chili	68,497	197,780
Honolulu	15,886	45,075
Java	66.800	189,885
Manila	56,827	156,100
Peru	10.272	30,405
Japan	4,108	11,210
Portland, Oreg	13,720	43,265
Total	1,756,356	4,633,315
1886.		
Victoria	640,655	1,684,895
South Australia	140,623	365,315
Tasmania	47,501	130,165
New Zealand	165,217	450,935
Queensland	22,053	60,755
South Sea Islands	815	2,495
New Caledonia	9,537	26,105
Fiji Islands	21,929	61,270
Hong-Kong	100,586	260,740
China	23,743	61.975
Chili	41,704	119,985
Honolulu	23,763	64,030
Western Australia	11,726	32,065
Java	33,294	93,030
Manila	36,617	97,545
Peru	5,806	15,675
Mauritius	6,334	18,010
Singapore	5,934	16,170
Ceylon	5,868	17,700
Burmah	8,155	23,225
Guam	1,795	4,955
Mexico	9,287	25,920
Bangkok	1,885	5,150
Burrard's Inlet	200	600
Panama	3,555	10,125
British New Guinea	600	1,650
Macassar	390	1,375
Padang	3,863	11,060
Petropaulovski	1,750	4,900
Cape Town	318	870
India	54,386	151,385
San Francisco	218,819	634,430
Wilmington, Cal	53,433	158,175
Portland, Oreg	22,111	61,250
Astoria	11,411	31,050
Total	1,735,865	4,735,010

EXPORTS TO UNITED STATES.

The exports of coal to San Francisco and other ports on the Pacific coast of the United States have steadily increased during the last few years. The low cost of freight and the drawback of 75 cents per ton allowed upon coal imported into the United States for the use of foreign and domestic steamships are the principal causes of the increase.

I give below a table showing the quantity and value of coal exported to the United States from New South Wales from 1881 to 1886, inclusive, and the names of ports to which exported:

Port.	Quantity.	Value.
1881.		
	Tons.	
San Francisco	138,772	$317,935
Portland	11,230	23,175
Total	150,002	341,110
1882.		
San Francisco	172,958	482,480
Portland	6,113	18,560
Total	179,071	501,040
1883.		
San Francisco	191,184	579,105
Astoria	1,190	3,250
Portland	16,291	45,610
Total	208,665	627,965
1884.	*Tons.*	
Wilmington, Cal	32,506	$106,190
Astoria	1,481	4,170
San Francisco	167,888	494,690
Portland, United States	5,627	17,055
Total	207,502	622,105
1885.		
Wilmington, Cal	31,695	101,120
San Francisco	171,042	497,515
Portland	13,720	43,265
Total	216,457	641,900
1886.		
San Francisco	218,819	634,480
Wilmington, Cal	53,483	158,175
Portland	22,111	61,250
Astoria	11,411	81,050
Total	305,824	884,955

MINERS' ACCIDENTS, DISPUTES ABOUT WAGES, ETC.

The total number of miners at the various collieries in New South Wales during the year 1885 was 7,197; of these 1,510 were employed above ground and 5,378 below ground.

An interesting feature in connection with coal mining in New South Wales is its comparative freedom from accidents, such as fire-damp explosions, which render the loss of life so appalling in Britain. The total number of accidents in New South Wales during the year were 51, and of these only 11 were fatal. Of the non-fatal accidents 31 occurred in the northern district and 9 in the southern district; of the fatal accidents 8 occurred in the northern district and 3 in the southern. The greater portion of these accidents were occasioned by the fall of coal, and but one or two from the explosion of gunpowder.

The wages paid to miners are from 10*s.* ($2.43) to 15*s.* ($3.65) per day. The wages and the number of hours the men are required to work have been the causes of frequent disturbances, which in some instances have led to serious rioting and loss of life. These disputes are usually settled by arbitration. They assume a very grave character when the coal companies insist on the employment of non-union men, or blacklegs, as they are called by the miners. As many as 500 to 700 men are out on a strike at once, and it is astonishing the length of time they are enabled to hold out. One of the most noted of these strikes occurred last year, when 300 of the men struck at the Lambton mine, in the northern district. The men demanded additional pay as the difficulty of the work increased, and the labor council of their district approved of their course. The miners held out for a period of six months, and during that time they refused to do work of any kind and were supported by contributions from the various trade and labor organizations in the colony. The difficulty was finally settled by arbitration, concessions being made on both sides.

The strike at Mount Kembla and Mount Keira, in the southern district, which began in December last, was of a very serious character. The men, after committing several acts of violence, refused every concession offered by their employers, and the dispute, which promised to become still more serious, was not settled until a large number of miners had been ordered from Europe by cable. It was then agreed that the men should resume duty upon the terms formerly proposed by their employers, and that the European miners should upon their arrival be provided with work upon other coal-fields in the same district.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Sydney, *New South Wales*, *February* 9, 1887.

THE GOAJIRA PENINSULA.

REPORT OF CONSUL PLUMACHER.

The peninsula of the Goajira, which forms the extreme northwestern part of Venezuela, is chiefly remarkable for its entire abandonment into the hands of the Indians of the same name, who have succeeded up to the present day in preserving their absolute independence, recognizing no authority except that of their own chiefs.

Were this section distant from civilization, as are the Upper Orinoco and Amazon Indian regions, this state of affairs would excite no comment. But situated as it is between the progressive State of Zulia on the one hand and the settled Colombian territory of Rio Hacha on the other, it seems strange that no successful attempts have been made to open up a country which, from its favorable position and natural advantages, offers such an excellent field for colonization.

THE GOAJIRA INDIANS.

At the time of the Spanish conquest the Goajiras occupied their present territory, but tradition is almost silent respecting their remote antecedents.

They are divided into different tribes or clans, all, however, being of the same race, with similar language and customs, and the different divisions now existing are no doubt developments of individual families of the same general stock. They are robust and warlike, with dark complexions and straight hair, and, like most savages, are irreclaimably given to raids and robberies, keeping the interior of the peninsula in an almost constant turmoil.

The Venezuelan Government has contented itself with placing a military post on the frontier for the protection of the whites who, attracted by the fine grazing country, have established cattle farms and small settlements in the neighborhood.

In spite of this precaution, however, the Indians at times combine in numbers of several hundreds, make a dash into civilized territory, and retreat to their own domain with their plunder.

TRADE OF THE INDIANS.

Although the Goajiras are entirely intractable, and, remembering the cruelties practiced during the conquest, preserve a constant hatred towards all who are not of their own race, yet they are quite alive to the advantages of trade, and in the dry season make frequent visits to the frontier settlements, where they exchange their cattle, horses, asses, &c., for the products of civilization, among which rum holds the first rank. They barter also for calicoes, sheeting, beads, knives, and other articles useful to the savage, but which he has not the means or ingenuity to supply for himself, giving in exchange animals of their own breeding and not unfrequently young children and girls, which latter become the mistresses of their purchasers, and the former are trained to domestic service.

When the Indians are not unquiet it is frequently the case that traders penetrate into the interior, and these expeditions have at times given great profit. It is necessary, however, for the security of the individual that he should have some special bond of union with the prominent caciques, and this is generally marriage, which has become a mere matter of trade.

On account of the division of the Indians into various tribes, usually at feud with each other, it often happens that a trader has several wives, each being of influence in her particular clan, which insures her husband a safe-conduct in her own district, where she continues to reside among her people, and seeing her husband only when he may chance to visit that particular region.

Marriage of this character is a somewhat expensive luxury, as besides the articles of value, amounting sometimes to several hundreds of dollars, given to the girl's father, all of her relatives, to the most remote degree of kin, expect to be favored with gifts.

CUSTOMS OF THE INDIANS.

These Indians know but little of agriculture, but engage largely in the breeding of cattle, for which the peninsula is most admirably adapted. Maize and vegetables are cultivated on a small scale, and cotton, which grows wild in some localities, gives exceptional returns when any attention is paid to its culture.

The women spin their own yarns, and with rude hand-and-foot looms weave a substantial fabric of which they make hammocks and other articles which are durably dyed in various colors by peculiar earths and the juices of trees and plants.

The customs of the Goajiras are singular and interesting, and it is noticeable that their laws and usages have remained without change from time immemorial. One of their most striking customs is a complicated system of what is called by them "payment of tears and blood;" and this is the principal cause of the conflicts between the clans.

Among all savages revenge is a sacred duty, and as according to Goajira ethics an entire tribe is supposed to be responsible in the aggregate and individually for the acts of one of its members, a trifling affair in the beginning may produce grave consequences ultimately. This is one of the reasons why it is so dangerous for white men to enter the Goajira territory, as the Indians make no distinctions of nationality, but consider all who are not of themselves as belonging to one grand family, all the members of which are responsible for a real or fancied outrage committed by an individual, and any one of whom is to be considered to a certain extent as a hostage for the conduct of the rest.

By the payment of the compensation of tears and blood, however, any injury inflicted may be condoned, it being noticed that it is not the aggrieved individual who demanded this payment, but his relatives, especially those on his mother's side, who are supposed to be of a closer relationship than the family of his father.

The complication of this system will be seen from the following examples:

(1) *Self-inflicted injuries.*—If an Indian accidentally wound himself, break a limb, or meet with any similar accident, his mother's family immediately demand of him the "payment of blood," on the theory that, as his blood is also their own, he has no right to shed it without making compensation. The relatives of his father also claim the payment of their tears, which is of less value. Even the friends who may have witnessed the accident are entitled to compensation for the grief into which they were plunged at seeing their companion suffer.

The amount of the payment depends upon the character of the injury. A trifling cut of the finger calls for a little corn, a kid, or something of equal value, and if the matter is more serious nothing less than a goat or a sheep, or perhaps a cow, can assuage the sorrow of the sympathizing relatives.

If the injured party is too poor to satisfy these exigencies he must go begging, going from hut to hut, and no one will refuse to contribute his mite to assist in the performance of a recognized duty.

(2) *Injuries inflicted by animals.*—If an Indian borrows a horse from a friend and is thrown, or in any way injured, his relatives demand compensation from the owner of the animal, alleging with undeniable logic that the accident could not have happened had he not lent it. In case a person is injured by his own animal he himself must compensate his relatives accordingly.

(3) *General responsibility.*—This is of daily occurrence, and may happen in various ways. For example, the seller of any article is responsible for the results which may follow from its misuse. For this reason traders penetrating to the interior do not carry rum for traffic unless they are strong enough to defend themselves and property, as should compensation for the results of over-indulgence be denied, the Indians would feel quite justified in seizing anything they might be able to lay hands upon.

It is considered an affront, which must be paid for, to call a Goajira by his Indian name, as nearly all have adopted Spanish patronymics and many have even become baptized, not from the slightest religious feelings or knowledge, but simply to enjoy a big spree gratis at the feast celebrating the ceremony, and to have afterwards god-fathers to appeal to and impose upon.

Pronouncing the name of a deceased Indian in presence of any of his surviving relations is also a most grave offense, and can only be condoned by large payments.

In these complicated laws of compensation, as may be imagined, strict justice is not always considered, as if a person should be wounded or lose his life while attempting to kill another, the latter must pay blood and tear money in the same manner as if he had been the aggressor. To such an extreme is this system carried that should a child die in the absence of one of its parents, the latter can demand from the other payment for the tears supposed to be shed over the occurrence.

MARRIAGE.

The ceremonies attending marriage, which is a mere matter of buying and selling, are as follows:

As soon as a girl reaches a marriageable age she is shut up alone in an isolated hut, deprived of all ornaments, and dressed in a long white gown. During the first few days she must not drink water, sustaining herself only with a composition of medicinal herbs called "*haguape.*" She is then publicly spoken of as "*surtirse surupauru,*" the literal translation of which is, "shut up in her house."

The duration of this retirement varies according to the position of the family. The poorer Indians cannot permit their daughters to remain idle for more than a few weeks, while among the rich this seclusion may continue for two, three, or even four years.

During this time the girl learns all that a woman is supposed to know. She is taught to spin and weave, make clothing and hammocks, and everything pertaining to aboriginal domestic economy. The inactive life soon makes her fat, her complexion becomes clearer, and in many cases there may be noted absolute beauty of feature.

It is not forbidden to the young men to glance at her through the door (though they may not enter the house), provided the inspection is made with matrimonial ideas, and should an eligible suitor demand her hand, she is usually at once released and the bargain is made, although the richer bridegrooms often prefer that the full period of seclusion be observed.

When the young lady is thus restored to society a grand family feast is celebrated, cattle are killed and a ball organized, while the heroine of the day, dressed in the clothes which she has made during her retirement, and in the glory of her restored ornaments, is then considered as married without further ceremony except the payment of her stipulated price. This consideration generally takes the shape of cattle divided between the father and other relatives of the bride. The woman is then obliged to maintain her husband in food and clothing, and is the principal in all matters of business, no bargain made by a man being considered valid unless it has received the sanction of his wife. Women are treated with much consideration, and it is important for a stranger to gain their good will.

An Indian cannot maltreat his wife, as, by the law of compensation, her relatives would demand a reckoning, and should the woman die in childbirth the husband must pay to her father an amount equal to her original price, but if the wife prove unfaithful, which is of very rare occurrence, her father must refund to the husband the payment made at the time of the marriage. Should he be unable to satisfy this demand, he looks to the seducer to make good the amount, besides the "payment of tears' to the girl's mother.

Upon the death of the husband the wife becomes the inheritance of one of his brothers, usually the youngest, and if there are no brothers, of the nephew.

FUNERALS.

The death of an Indian is always followed by a grand debauch, the duration of which depends solely upon the quantity of liquor obtainable.

At a recent funeral feast of a great cacique more than one hundred and fifty bullock hides were exchanged for the rum consumed. As liquor is exceedingly cheap, and hides, being an important article of export, command a high price, the amount of rum drunk on this occasion may be calculated as something relatively enormous.

At the close of the funeral festivities the dead Indian is buried in his hut, in the same spot where he was born, where the body remains for two years, at the expiration of which the bones are collected, sealed in an earthenware jar, and buried in the cemetery of the clan, which is usually a concealed spot surrounded by a hedge of living cactus.

DRESS.

The dress of the Indians is simple, and probably the same fashion has existed for centuries. The males, in every-day attire, wear a cloth around the loins and a plaited grass ring upon the head, but on occasions of ceremony they appear with handsome cotton mantles of variegated colors, head-dresses of feathers, and faces painted most extravagantly.

The dress of the women is a long voluminous gown, made exactly like a bag, with apertures for the head and arms. In a high wind these garments inflate, giving to their wearers the appearance of walking balloons. The females also paint profusely, but neither sex seems to have any conception of artistic effect.

The ornaments most esteemed are collars, necklaces, and bracelets of beads, which are used with great prodigality. These are for the most part of foreign make, but the most valued and the possession of which indicates wealth are the "tumas." These are roughly-shaped reddish stones, perforated for stringing, and comprising varieties of jasper, onyx, cornelian, and agate, and are apparently of great antiquity, having been handed down from generation to generation from long before the Spanish conquest. In no part of the Goajira peninsula have these stones been discovered in a natural state, and it is believed they were brought by the remote ancestors of the present race, who no doubt migrated from some other part of the continent.

In ancient graves, of which the Indians themselves have no record, the tumas have been found, and in all cases perforated like beads.

The possessor of a necklace of tumas may consider himself rich, but much suffering and privation will be endured rather than part with these heirlooms, and they are consequently most difficult to obtain even at a price far above their intrinsic value.

ARMS.

The traditional arms of the Goajiras are bows and arrows, and although they are plentifully supplied with fire-arms, they still cherish the weapons of their ancestors. Of the arrows there are three classes:

(1) The "*hatu*," pointed with a sharpened nail or hard wood for small game, such as birds and lizards.

(2) The "*siquarrai*," with barbed-iron points made of knife-blades, and used both in the chase and in war.

(3) The poisoned arrows called "*aimara*," about three feet long, and pointed with the spur of the sting-ray dipped in an active poison made from putrefied animal substances in the following manner: Dead toads, snakes, and other reptiles are placed in a vessel and allowed to remain until a homogeneous mass of rottenness is formed, which is condensed over the fire to a thick paste. The wound made by an arrow thus poisoned generally causes death in from five to ten days, the only possible chance of averting fatal results depending upon the immediate extraction of the arrow-head, followed promptly by cauterization of the wound.

The Indians have also in their possession many Remington and other improved rifles, besides old-fashioned percussion and flint-lock pieces, the latter being preferred on account of the difficulty and uncertainty of obtaining metallic cartridges.

It is contrary to law to sell arms or ammunition of any description to the savages, but the prohibition is constantly being evaded by the traders, as the large profits thus secured render the temptation irresistible.

FEATURES OF THE PENINSULA.

The extreme south of the Goajira region is well populated by whites engaged chiefly in stock-raising.

The general character of the country is that of a flat plain, with tracts of sand-hills here and there, and covered with a variety of grasses, of which I forward specimens and inclose a description.

There is an infinite variety of herbaceous plants, many of which are used by the Indians as remedies. I have secured a small collection of specimens, which I forward by this steamer, inclosing herewith a list and account of their reputed properties.

Towards the north and west of the territory there are ranges of hills of considerable elevation, and the country becomes more broken and wooded. Cattle thrive wonderfully in these plains, the great drawback being that in exceptionally dry years the want of water is severely felt. There are no running streams, but the rain which falls in the wet season forms lagoons from 1 to 3 feet in depth in the low levees of the savanna, which are supposed to last during the dry weather. As a rule the cattle-breeders have had general good fortune in this respect, but in 1885 there was no rain during a period of eleven months, a phenomenon which caused serious losses.

To provide against the contingency of the complete drying up of the lagoons, each breeder has near his house, and surrounded by a fence, an excavation of from 8 to 10 feet deep, and of a diameter proportionate to the number of his cattle. This excavation fills during the rainy season, and is then covered with a rude shed of branches to lessen the evaporation. This is the reserve stock of water in case of prolonged drought, and as the cattle, if allowed free access, would soon destroy the well entirely, the work of dipping out in buckets and pouring into a trough on the outside of the fence is a never-ceasing and tedious task, as no one has as yet thought to put up a pump and thus save time and labor. It is seldom, however, that this necessity arrives, as although the majority of the lagoons in the savanna always dry up before the commencement of the following rainy season, yet there are always a few which usually hold over sufficient water.

There is a curious circumstance connected with these miniature lakes, and for which I have heard no satisfactory explanation. Every one swarms with small fish, although the same spot may have been a few weeks before completely parched and dry. As the dry season advances one after another of the lagoons disappear, leaving their former beds exposed for months to a fierce sun, which makes it impossible to believe that the life of any aquatic animal could be preserved in a soil so burnt and arid. With the rains, however, the fish appear as usual, the Indians firmly believing that they fall from the sky.

Mr. Auguste Pelissier, a gentleman residing for years on the frontier, and who has given some thought to the subject, has a theory that the various birds (storks, cranes, ducks, pelicans, curlew, snipe, &c.) which frequent these lagoons in great numbers eject with their excrement undigested fish eggs, and that the pools are stocked in this manner.

No land in the peninsula is held by private title. The savanna is free to all, and the settler places his house and corrals where inclination may lead him.

Stock-tenders are not usually employed, except when an Indian raid is apprehended.

INDIAN RAIDS.

The constant risk of predatory incursions by the savages has been an undeniable drawback to the successful pursuit of cattle-raising on the frontier; but since the sound thrashing the Indians received about a a year ago, it is believed that this danger is greatly lessened, if not entirely removed.

In February, 1886, the frontier district near the important town of Sinamaica was invaded by a force of about 250 mounted Goajiras and 150 on foot, armed with rifles in addition to their bows and arrows. They succeeded, before the neighborhood was aroused, in driving off many hundreds of cattle and a large number of horses; but before they could cover their retreat a small mounted force of 55 whites attacked them and killed the chief cacique at the first fire. This so demoralized the robbers that the little band of assailants were able to recover all the property stolen, besides many fine horses belonging to the Indians, who, after suffering a slaughter which was almost a massacre, fled to the interior. This had a most wonderful effect, and if the Government had chosen to follow it up with a determination to preserve order and insure security for travelers and explorers throughout the entire peninsula, the task would not have been of difficult accomplishment.

CATTLE BREEDING.

The cattle of the Goajira are not very large, but fatten well, and with care and ordinary good luck the profits are very satisfactory, it being calculated that in four years the original capital invested may be doubled.

The expenses are not great, as but few hands are employed, and wages range from 4 to 8 pesos per month, with board.

The cows are milked once a day, averaging about 8 quarts.

During the day the cows and calves are separated in different parts of the savanna, and are brought to the corrals in the evening. The cows are then milked and the calves remain with their mothers during the night.

There is a fashion universal in South America of tying the calf to the fore leg of the mother during the milking, as it is believed that without this precaution the cow would give little or nothing.

As in most parts of the world the breeders at times have had to encounter disease among their stock similar to the cattle plague which caused a few years ago such serious losses in the United States, but it has never assumed alarming proportions.

One great and constant annoyance is caused by parasitic worms which burrow into the ears, anus, and navel of new-born animals, and in any other vulnerable spot, forming ulcers which often produce death. In all tropical countries one of the chief cares of a breeder is the sharp lookout which must be kept for these parasites, and their prompt removal as soon as discovered.

ADVANTAGES OFFERED.

In spite of the various drawbacks it may be asserted that the Goajira offers exceptional advantages, and were a few artesian wells sunk for purposes of irrigation, agriculture also would be an important industry, and especially cotton growing, for which the soil seems particularly suitable.

The position of the territory gives it ample shipping facilities, but not on that part of its coast pertaining to Venezuela.

One-half of the peninsula belongs to Colombia, which nation indeed claims it all, the matter now being under the arbitration of the Spanish court, and the magnificent bay of Bahia Honda, on the northwest, is the future harbor of the territory.

Recent surveys have been made by an English engineer with a view to find a good harbor on the east coast where a port and custom-house might be established with a railway to Maracaibo, thus making a port of call for ocean steamers and doing away with the necessity of entering the lake. The result of the surveys, however, have demonstrated the impracticability of this project, as no sheltered harbors exist and the depth of water along shore is not sufficient.

The southern limit of the region inhabited by the Goajiras is formed by the river Limon, whose neighborhood is worthy of careful exploration. For some distance from its mouth the country is somewhat settled both by breeders and agriculturists, as the soil is of unsurpassed fertility, but towards its headwaters, which take their rise in a mountain range near the Colombian frontier, civilization has never penetrated, and the country is as yet virgin. Mahogany and other valuable woods exist in abundance, and the flora generally is varied and valuable.

Clearing land would be a most profitable enterprise instead of an expense, and this being accomplished a colony of energetic agriculturists would obtain surprising results, as the proximity of the river renders irrigation of easy and cheap accomplishment and offers a facile outlet for the products of the soil and forests.

Near the sources of the river Limon excellent indications of the precious metals have been discovered by the few adventurous spirits who have penetrated those unexplored regions, and it is to be hoped that at no distant day this territory, doubtless rich in mineral wealth, and offering in other respects exceptional advantages to the settler, may be made the object of a thorough and minute examination.

E. H. PLUMACHER,
Consul.

UNITED STATES CONSULATE,
Maracaibo, March 15, 1887.

Description of specimens of grasses from Goajira peninsula forwarded to the Department of State.

Saladilla.—A fine nutritious grass, and the most esteemed for fattening cattle. In the dry season, however, the *saladilla* becomes covered with a black dust, rendering it unpalatable.

Cardillo.—A curious grass, filled with burs or *cardillos*, similar to the sand-burs of the United States. This grass is disseminated universally, growing in perfect harmony with other grasses, and is eaten, burs and all, by the cattle. Sheep and young goats and donkeys suffer much from the *cardillos*, as they are detached at a touch and embed themselves in the coat of the animal, causing ulcers to which the worms get access, often producing death.

Pata de gallina.—So called from a fancied resemblance of its flower to the foot of a hen. This grass forms a thick carpet, and in the rainy season becomes beautifully green and attractive. It is very nutritious and fattening, and is highly esteemed.

Cortadora, or cutting grass, which is very appropriately named, as its edge draws blood at a touch. This is considered the least valuable of all the grasses, and the cattle will only eat it from necessity.

Paja de hormiga.—A pretty flowering grass, of fine texture, and considered an excellent food for stock.

Flor de tierra.—Resembling a coarse moss; not much esteemed.

Paja San Antonio.—Resembling somewhat the *pata de gallina*, and equally valuable.

Paja del zorro.—A grass which is found in great abundance and has good properties, although inferior to the *saladilla.*

There are many other varieties of grasses scattered over the peninsula, and some no doubt are as yet unknown to the botanist. The *saladilla*, however, is by all accounts far superior to all others, and judging from the sleek, well-fed look of the cattle there can be no question that it is a most valuable pasture grass.

When certain portions of the savanna are completely overflowed during the rainy season there is found at the bottom of the lagoons a species of moss of which the cattle are very fond, and they may be noticed standing for hours with the water up to their bellies and diving under with great expertness in order to fish up mouthfuls of the coveted moss.

Description of the specimens of herbal remedies used by the Indians of the Goajira peninsula, and forwarded to the Department of State.

(1) *Palo amargo.*—The *palo amargo* is a tree somewhat resembling the olive in size and general appearance, its foliage being of a dark lustrous green. The bark is used by the Indians as a substitute for cascarilla in the treatment of fevers, and the results are said to be excellent. An infusion for the same purpose is also made from the leaves and flowers.

(2) *Sávila.*—Indian remedy for the gonorrhea. The *sávila* is a creeper, and when fresh contains a thick white milk. The method of applying this remedy is simply to cut off a few inches of the living plant and insert in the urethra as a bougie, changing it three or four times a day.

(3) *Barradera.*—A hot infusion is used as a vermifuge.

(4) *Pericon.*—Used in combination with the *barradera*, which then becomes not only a vermifuge but also a febrifuge.

(5) *Brusca* roots and flowers, pounded and well boiled in water. The water is then used as a friction in cases of rheumatism.

(6) *Brusca* in grain and in the bean.

(7) *Brusca* grain, roasted and pulverized. This is drunk as a substitute for coffee, and is said to be an excellent remedy for irritation or inflammation of the bowels.

(8) *Yerba de la India.*—Used as an infusion for coughs, chest diseases, and catarrh.

(9) *Pinga de perro.*—Hot infusion for the cure of diarrhea.

(10) *Tapa-leche.*—Said to be a remedy for small-pox.

(11) *Contra culebra.*—Antidote to bite of snakes and other venomous animals. Drink in infusion and apply the bruised plant to the wound.

(12) *Sen.*—A very powerful purge.

(13) *Morita.*—The water in which *morita* has been boiled is said to dry up syphilitic and other virulent ulcers.

(14) *Malvilla.*—Used in foot-baths in cases of fever.

(15) *Culantrillo.*—Infusion is given as a remedy for diarrhea.

(16) *Emetic bean* (name not ascertained).—A small portion powdered and administered in tepid water causes most violent vomiting.

(17) Remedy for dysentery, said to be very efficacious. It is made of pulverized goat manure, mixed with the chopped leaves of a plant, of which specimens could not be procured nor its name ascertained. A small quantity of this composition is said to cause bloody discharges to cease entirely in a few hours.

THE FIELD FOR AGRICULTURAL MACHINES IN GERMANY.

REPORT OF CONSUL GOODWIN.

A gentleman interested in Saxon agriculture* has just published an article containing a mass of statements and figures which seem to show that modern agricultural machinery is in use in Saxony to a far greater extent than has been generally supposed. The exhibit made by this writer is even surprising to many native Saxons, particularly so to the farmers of this consular district, who, though as industrious, painstaking and intelligent as any in Germany, are prevented from engaging in farming operations on a large scale by unfavorable conditions of soil and climate. To ascertain how many and what kinds of agricultural machines were in use in Saxony two ways were suggested, one by means of inquiries directed to the several *landwirtschaftlichen Vereinen*, or farmers' clubs, which exist, if not in every farming village, certainly in every farming community of respectable size; the other by means of a canvass of the manufacturers who sell such machines to Saxon farmers.

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* Herr K. von Laugsdorff.

In 1878 an enumeration showed that there were in use in Saxony 124 large agricultural machines of various kinds having steam power, and fifteen manufacturers, not including several who are known to have sold quite largely to Saxon farmers, report that between 1878 and 1887 they sold 39 machines, making the number of steam-power machines in use at the present time, according to this very imperfect reckoning, 163, of which 117 are movable and 46 stationary machines.

The idea of obtaining more complete information by soliciting answers from the farmers' clubs was found to be impracticable and was abandoned. There are 480 of these clubs in Saxony, not counting those organized to promote interest in special branches of agriculture and horticulture; it was found that the number of clubs was so great, the boundaries of the club districts so indistinct, and the organization of some so imperfect that it would be better to adopt the other plan and address inquiries to the manufacturers. Upon investigation this, too, was found to present difficulties because of the large number of firms and individuals scattered over a great territory, who have sold agricultural machines in Saxony, and because of the disinclination of many to furnish precise facts and figures. But the attempt was made, and, incomplete as are the results, the showing made is, as before said, surprising to many Saxons, and quite astonishing to those who have had no special opportunity to examine the subject.

Of 230 manufacturers, large and small, domestic and foreign, the question "How many agricultural machines and large implements have you sold to the farmers and authorities of Saxony within the last ten years?" was asked. Of this number only 43, or a little less than one-fifth of the whole number, returned specific replies. Among those who did not respond at all or failed to furnish precise information are several concerns whose business with Saxon farmers has been large, including a Saxon mowing-machine manufacturer, a large general agricultural manufacturing concern of South Germany, and the establishment of Rudolf Sack, of Plagwitz-Leipzig, which, from a small beginning in 1856, claims to have become in 1886 the leading plow-manufacturing concern in the world. The facts and figures supplied by the 43 firms and individuals referred to are found in this table:

Kind of machine.	No.	Kind of machine.	No.
Mowing-machines	1,270	Machines for cutting turnips	3,430
Horse-rakes	870	Mills for grinding and crushing	1,000
Hay-turners	290	Thrashing-machines worked by steam and water power.	226
Machines for sowing seed	1,860		
Machines for planting potatoes	12	Thrashing-machines worked by horse-power.	4,360
Machines for harvesting potatoes	790		
Machines for spreading manure	150	Thrashing-machines worked by hand	880
Hoeing-machines (for hoeing rows)	140	Implements for transferring power from previously existing steam-machines to thrashing-machines and those for cutting fodder.	270
Skim plows with more than one share	600		
Cultivators and root-cutters	420		
Meadow-harrows	820		
Sorters	1,400	Cream-separators	34
Machines for cutting hay and straw	4,000		

Mr. Sack furnishes no figures showing the extent of his sales to Saxony between the years 1877 and 1887, but reports that from 1856, the date of his establishment in business, until January 1, 1886, he sold to all parts of the world, chiefly to Europe and South America, as follows:

Kind of machine.	No.	Kind of machine.	No.
Drill-machines	15,640	Plows for taking out potatoes	5,210
Hoeing-machines	3,640	Plows for taking out turnips	1,280
Deep-culture plows	18,150	Subsoil plows	4,270
Universal plows	116,720	Plows for hilling corn, &c	5,150
Plows with more than one share	22,120	Grubbeos and root-cutters	3,140
Side-hill plows	1,670	Harrows, &c	1,790

Mr. Sack adds that in 1886 his sales included 30,000 plows of all kinds, but does not say how many of these were sold to Saxon farmers. As lately as 1870 his business was confined almost exclusively to Germany, but last year he had so developed his foreign trade that nearly 60 per cent. of his sales were exports. He began business in 1856, with Saxon trade almost exclusively; in 1876 only 15 per cent. of his sales were to Saxony; in 1886 only 7 per cent. In the latter year he says he sold 2,100 plows to Saxon farmers, and avers that his total sales of agricultural machines and implements to them in that year exceeded the sales of his competitors in ten years.

Mr. Sack also supplies a table, based upon the most complete information he could obtain, showing that there are in use in Saxony an average of 1 steam thrashing-machine for every farm of 100 hectares (1 hectare equal to 2.471 acres); 1 horse hay-turner for every farm of 90 hectares; 1 horse-rake for every farm of 65 hectares; 1 potato-harvester for every farm of 60 hectares; 1 cultivator for every farm of 60 hectares; 1 side-hill plow for every farm of 40 hectares; 1 hay and straw cutter for every farm of 40 hectares; 1 root cutter for every farm of 35 hectares; 1 drill plow for every farm of 30 hectares, and 1 horse thrashing-machine for every farm of 30 hectares. This calculation having been based upon a low estimate of the number of machines sold and in use is considered a long way within the limit of fact.

To show that the average number of modern machines in use in many sections of Saxony is larger than the general average, a number of statistical tables are furnished. For instance, the Farmers' Club of Zittau reports that in the twelve farming villages to which its membership is confined there are in use 208 cultivators, 237 hay and straw cutters, 194 root-cutters, 148 common thrashers, 135 horse thrashers, 40 side-hill plows, 38 mowing-machines, 34 drill-plows, 24 horse-rakes, 2 horse hay-turners, 1 steam thrasher, and 50 other machines of various kinds. This is equal to 1 cultivator for every farm of 10 hectares; 1 hay and straw-cutter for every farm of 8 hectares; 1 root-cutter for every farm of 12 hectares; 1 common thrasher for every farm of 20 hectares; 1 horse thrasher for every farm of 25 hectares; 1 mowing-machine for every farm of 39 hectares; 1 drill-plow for every farm of 39 hectares; 1 horse rake for every farm of 40 hectares; 1 hay turner for every farm of 80 hectares; and 1 steam thrasher for every farm of 280 hectares.

The Farmers' Club, with headquarters at Reichenau, makes a similar report; in the three farming towns of that district there are in use 343 machines, 100 of which are horse-power thrashing-machines, 20 horse-rakes, 14 cultivators, 11 drill-plows, 6 mowing-machines, 2 steam thrashing-machines, and 7 horse hay-turners. In the village of Obercunnersdorf, where there are but eighteen farms of over 5 hectares of land each, and only one of over 15 hectares, and that one containing but 18.8 hectares, there are in use 1 steam thrasher, 2 horse-rakes, 2 hay-turners, 4 drill-plows, 4 cultivators, 6 hand thrashers, 7 water-power thrashers, 30 root-cutters, 35 horse thrashers, and about 150 other machines of various kinds.

A manufacturer of agricultural implements who canvassed this and neighboring sections lately reported to his firm: "The farmers are so well supplied with machines and utensils that we must look elsewhere for a market for our machines."

Several farmers' clubs report that in their neighborhoods there are more mowing-machines and drill-plows in use than there are farms, while of steam plows and thrashers there are but few, because one of each of such machines does the work of several farms.

According to the latest statistics available from the office of the Saxon minister of the interior, there are 154,158 farms in Saxony, and only 18,801 large agricultural machines in use. The farms are divided as to size as follows:

Size of farm.	No.	Size of farm.	No.
0.2 to one hectare	56,020	50 to 100 hectares	806
1 to 2 hectares	21,464	100 to 200 hectares	526
2 to 5 hectares	20,881	200 to 500 hectares	225
5 to 10 hectares	17,826	500 to 1,000 hectares	6
10 to 20 hectares	18,437	Over 1,000 hectares	1
20 to 50 hectares	8,966		

That is to say, the claim is that of the smallest farms, viz, 0.2 to 1 hectare of land each, 0.014 per cent. are supplied with modern agriculttural machines; of those of from 1 to 2 hectares, 0.159 per cent.; of those of from 2 to 5 hectares, 1.45 per cent.; of those of from 5 to 10 hectares, 11.27 per cent.; of those of from 10 to 20 hectares, 41.41 per cent.; of those of from 20 to 50 hectares, 77.05 per cent; of those of from 50 to 100 hectares, 92 per cent.; those of from 100 to 200 hectares, 95.82 per cent.; those of from 200 to 500 hectares, 97 per cent.; above that size, 100 per cent.

These figures certainly make a much better showing for the Saxon farmers than people who have traveled over the country but who have notspecially studied the subject have supposed; but it should not be taken for granted that there is not in Saxony at present an opportunity to sell improved agricultural machines. Much of the machinery and many of the implements in use and called "modern" would excite the risibilities of a wide-awake American manufacturer or a Western farmer.

There ought to be a good market here for American machines and utensils, in spite of all difficulties in the way, but there will never be until our manufacturers are prepared to go to work in the same careful, plodding, but energetic way that the Germans have worked to secure the large trade which they now control in South America, Central America, Australia, and the East. They must not expect, no matter how excellent their machines, to build up a trade here by now and then making a great splurge, or wholly by advertising in trade newspapers, or by the spasmodic efforts of a few traveling agents. The value of judicious advertising in first-class trade journals, American and foreign, which have a circulation and standing in Germany, has been proven to my satisfaction, and to that of many consuls who have been longer in the service than I have, to be considerable; but advertising alone will not build up an important and profitable business for Americans here. Our strong agricultural-machine establishments should be represented here by permanent resident agents, not men of the horse-jockey, watch-trading stamp, whose aim is to entrap some confiding farmer into signing a note under the impression that he is merely signing a receipt or an agreement, but men of character and ability, having a thorough acquaintance with the German language, a complete knowledge of the uses and advantages of American machines, and a firm belief that they are superior to all others. Such men, well paid, would take great pride in their work and would in due time accomplish very important results.

The Bureau of Statistics at Washington shows that in ten years over $6,000,000 worth of American agricultural machines have been sold in Germany. Probably most of the sales were made to the farmers of Bavaria, Thuringia, Baden, Wurtemberg, and the Rhine country, certainly a small proportion to Saxony. Intelligent, systematic, persevering effort on the part of our manufacturers would have made the figures nearer ten than six millions.

It is a mistake for the great agricultural-machine establishments of the United States to establish general agencies for all Europe in London. Germany is fast becoming independent of England in every way, and Germans would rather deal directly with Americans than indirectly through Englishmen.

Consul Lang, some time ago, made the suggestion that a permanent exhibition of American products and manufactures be established in Hamburg; an excellent idea, and one which the Germans have adopted in several parts, and profited by. If one of our largest agricultural-machine manufacturers would send over a thoroughly competent man, establish him in Berlin with a stock of manufactured machines for exhibition, and give him authority to select able assistants to be located in the chief commercial city of each of the German states and principalities, I believe that the sale of American machines and implements could be doubled in the next five years.

It is a great compliment to the ingenuity and practical skill of American workers that nearly every important agricultural machine manufactured in Germany, and especially those whose praises are extolled the highest, are patterned after American machines as closely as can be without infringement of patent rights. But though they can be sold cheaper than the American machines they are not nearly as good. Take the best American thrasher, for instance; it is much lighter than any made in Germany, or any other European country; it has greater capacity, and in thrashing and cleaning grain will do nicer work than the best German machine. These machines are fitted with every attachment demanded in foreign countries. What is said of the lightness, capacity, and economy of the American thrasher may be said with truth of our portable and traction engines, mowing machines, binders, plows, cultivators, &c.

So many practical machines are invented and put on the market, every week, almost, in America that it is difficult to keep run of them. Some have never been seen in Germany, even by wealthy proprietors who carry on farming on an immense scale and profess to keep a sharp watch for all new machines of great practical importance to them. I believe there is a plow made somewhere in the United States which is so constructed that two horses can do the work of three, if not four, and which will turn a square corner as nicely as a gentleman's coupé, the driver not quitting his seat. This plow is said to be comparatively light, and yet strong and durable. Such a machine might frighten the natives in these parts when first introduced, but if it is what it is claimed to be, intelligent effort would secure a market for it. What the average German farmer must be convinced of is that American-made machines are durable. Everything made here is clumsy and heavy, and the idea is that it must be so in order to be durable. The farmers hear and read a great deal about the lightness of American machines and the rapidity with which they work, but they are quite uninformed as to their durability.

A young Saxon, who was born and spent most of his life in this rather behind-the-time section of it, went to the United States not long ago to "grow up with the country." He secured work in the city of New York as a clerk in an importing house, but it was too much of a strain upon his system, which for twenty years had been used to the easy-going ways of Saxon living. Within six months from the date of his departure he was back in his beloved Saxony again, and being asked why he had not remained longer in America, his answer was (if I may be allowed a free translation), "It was too —— quick for me over there."

That is the idea many Germans have of the United States and everything American—"too —— quick." They like to export their own products to the United States, and they do export them to the value of many millions of dollars annually, and their export trade is increasing rapidly. The American quickness in knowing a good thing when it is seen and buying it, especially when that thing is of German manufacture, they by no means object to; but no matter what may be said and written to the contrary, there is in the German mind an underlying suspicion of American productions which he cannot all at once get over. He reads of trains being run 100 miles without a stop; of people traveling across a great continent in eight days, living all the while luxuriously and only twice changing cars; of trains breaking through brand-new bridges or running off from one that had just been carefully inspected, then taking fire and roasting passengers to death; of toboggans that are sped for pleasure at the rate of 3 miles a minute; of boats that are sailed on ice almost as fast; of horses that trot a mile in two minutes and ten seconds, or less, and of other things, all surprising and some shocking, and his comment is like that of the Saxon youth who tested life in New York—"too —— quick."

So, my friends who make the best agricultural machines in the world, if you would build up a large trade in Germany and in Saxony, take practical steps to show the farmers that your machines have other merits besides lightness and speed, capacity and economy—four excellent qualities. Show them that they are durable.

GEORGE B. GOODWIN,
Consul.

UNITED STATES CONSULATE,
Annaberg, Saxony, March 17, 1887.

FARMING STATISTICS AND LAND INDUSTRIES IN THE DUCHY OF SAXE-ALTENBURG.

REPORT OF CONSUL MILLAR.

The extent of cultivated land in the Duchy* is 80,204.8 hectares (the hectare is approximately 2½ acres). Of this, 1.2 hectares are vineyard, 11,115.9 hectares meadow land, and 69,087.7 hectares arable and garden land. Of the latter, 48,244.3 hectares are devoted to grain, peas, and pod fruits, 11,723.8 to potatoes, beets, &c., 657.4 to rape, and 8,462.2 to plants for fodder. Among the fodder plants clover is the most important, covering no less than 7,169.6 hectares. Potatoes are planted in 7,948.7 hectares, red beets in 3,229.6 hectares, and sugar beets in 545.5 hectares; winter rye is grown in 16,162 hectares, oats in 14,726.1 hectares, summer barley in 8,351.9, winter wheat in 5,779.2 hectares, summer wheat in 1,167.8 hectares, summer rye in 716.7 hectares, vetches (a species of pea) in 636.8 hectares, peas in 595.1 hectares, beans in 94 2 hectares, lupins in 11.7 hectares, and winter barley in only 2.8 hectares.

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*Population, 155,000.

The fertility of the land is shown by the fact that grain produced amounted to 729,449 double cwt.;* pod fruits, 12,590 double cwt.; potatoes, beets, &c., 2,074,519 double cwt.; rape, 18,895 double cwt.; clover, lucerne, &c., 1,065 double cwt., with a middling harvest. The grain yielded 957,687 double cwt. straw, the pod fruits 17,549 double cwt. dry fodder, and the hay and aftermath 388,065 double cwt. Of fodder straw 376,165 double cwt. was produced.

The total of domestic cattle in the Duchy is given as 149,148, made up as follows: Horses, 8,921; oxen and steers, 9,487; goats, 14,121; sheep, 23,325; hogs, 39,581; cows, 53,713. These are divided as follows: Eastern division: Horses, 6,641; oxen, 5,899; goats, 4,820; sheep, 6,185; hogs, 23,092; cows, 37,971; total, 84,608. The remainder: horses, 2,280; oxen, 3,588; goats, 9,301; sheep, 17,140; hogs, 16,489; cows, 15,742; in all, 64,540—belong to the western division.

The excess of sheep and goats in the western division is explained by the greater extent of pasture land, which enables every peasant to keep a few sheep and goats, whereas these animals in the eastern district are only kept by the larger farmers.

For the same reason the eastern district is richer in horses and cows, which are there extensively used for plowing and agricultural operations.

To improve the breed the local agricultural societies are now introducing cattle for breeding from the Alps, previous experiments in that direction by individuals having turned out satisfactorily.

Fruit is an important factor in the income of the Altenburger farmers and peasants. Every village is surrounded by carefully cultivated orchards, and along most of the roads fruit trees have been planted, which in coming years will yield rich crops. It is reckoned that there are about 1,000,000 fruit trees in the Duchy. Half of these are plums and damsons (*Zwetschen*), 150,000 apples, about the same number of cherries, 100,000 pears, and about 5,000 walnuts. A poor harvest yields 50,000 double cwt., a good one 100,000, and a rich harvest more than 200,000. The income of the Duchy from its orchards is consequently very considerable, even when prices are depressed. Reckoning the double cwt. of pears at 4.20 marks (1 mark = 23.8 cents), apples 7.30 marks, plums 7.20 marks, cherries 12.70 marks, walnuts 24 marks, a good harvest yielded as follows:

Kind.	Number.	Yield.	Value.
		Double cwt.	*Marks.*
Plum trees	398, 541	32, 186	231, 865
Apple trees	137, 271	40, 048	202, 298
Pear trees	102, 211	34, 752	145, 597
Cherry trees	133, 990	15, 370	100, 069
Walnut trees	4, 206	212	4, 850
Total			864, 679

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* Dopple centner (double cwt.) = about 220¼ pounds avoirdupois.

The improvement of the culture of fruit is watched over by the Society for Fruit Culture, one of whose objects is the introduction of winter pears, which bring a higher price in the market than the earlier varieties, which will not keep.

An important branch of industry is the production of *Braunkohlen*, a sort of peat, for fuel. The diggings are chiefly in the eastern district, and are both underground and surface. There are forty-nine such diggings in the eastern district, and the output last year was 827,955 tons,* an increase of 6,952 tons on the previous year. The output brought 1,527,190 marks; 769,276 tons were sold outwards; the remainder was consumed in the Duchy. In the western district there are only three diggings, which produced 1,215 tons. The total number of persons employed in the diggings is 1,263, viz: 514 men underground, and 608 men and 141 women on the surface.

An interesting development of a subsidiary industry, the manufacture of wooden shoes, is also reported from Schmoelln. Wooden shoes have, up till now, never found much favor, owing to their ungainly appearance and the clattering sound they produce. A factory has, however, been recently erected in Schmoelln which devotes itself to the manufacture, by machinery, of a superior class of wooden shoes, faced with india-rubber or leather, so that they make no noise, and to the unpracticed eye are indistinguishable from ordinary leather productions. These new shoes are said to find an extensive sale not only in Germany, but in other countries, particularly in the north of Europe.

SAM'L ROLFE MILLAR,
Consul.

UNITED STATES CONSULATE,
Leipsic, February 25, 1887.

THE GERMANS IN EAST AFRICA.

REPORT OF CONSUL GOODWIN.

The number of stations and agencies thus far established by the German East African Society is 13, and the following particulars concerning them, recently made public, may be of interest to many Americans:

No. 1.—Chief depot at Zanzibar, founded by Dr. Carl Jühlke in December, 1884. Here are located the headquarters of the society, and are stationed the general manager, Government architect Hörnecke, and a local manager, Herr Rühle.

No. 2.—Simaberg, an experiment station founded in January, 1885, by Count Pfeil, and enlarged and for some time in charge of Herr Schmidt, a practical gardener. At this station are a steward, Herr Nielsen, and about 25 day laborers under the direction of the steward. A large stone house for the use of the steward and visitors has been erected and a number of smaller houses and stables. At this station all the tropical and European fruits and nuts are raised in abundance, and tobacco of good quality.

No. 3.—Kiora in Usagara, near Simberg, founded by Herr Söhnge in June, 1885, now in charge of a native overseer. An average of 8 day laborers are employed the year round, and a good article of cotton is raised. A stone house has been built, and a number of stables, where cows, goats, asses, and various kinds of fowl are housed.

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*Altenburg tons.

No. 4.—Halule, in Somaliland, not far from Cape Guardafui, founded by Herr Winter in 1885, now under his charge, not yet much developed.

No. 5.—Dunda, in Usaramo, on the Kingani, founded by Lieutenant Kreuzler in 1886. There are now stationed there the lieutenant in charge, a chief gardener, superintendent of plantation, a blacksmith, and about 60 laborers, employed by the day. A store, several houses, stables, and a blacksmith's shop have been put up. About 170 acres have been planted to rice, maize, potatoes, sugar, cotton, and tobacco.

No. 6.—Madimola, in Usaramo, on the Kingani, founded in 1886 by Lieutenant (Baron) St. Paul-Illaire, and now occupied by him, a head gardener and engineer, 30 to 40 laborers employed, and 32 acres planted in tobacco, cotton, rice, and maize.

No. 7.—Korogwe, in Usambara, on the Pangani, founded in 1886 by Lieutenant (Baron) von Gravenreuth. A large area devoted to maize, bananas, cocoanuts, beans, and potatoes.

No. 8.—Usaungula, on the Kingani, in Usaramo, founded by Lieutenant von Zelewski, Herr Graham, and Lieutenant von Bülow; 30 men employed, and 50 acres planted in cotton, tobacco, beans, &c.

No. 9.—Petershöhe, near Mbusine, in Useguha, founded by Lieutenent von Anderten, in 1886, and employing two head farmers and 35 laborers. Crops, cotton, tobacco and bananas.

No. 10.—Bagamoyo, in district of Zanzibar,on the coast, founded by Lieutenant (Baron) von Bülow, in August, 1886.

No. 11.—Tanganizko, on the Kilesi, in Girinama, a station of much trade importance, founded in 1886 by Lieutenant von Anderten, and occupied by him and three assistants.

No. 12.—Hohenzollernhaven, on the Wubuschimündung, established by Herr Janke, and to be in charge of Count Pfeil, assisted by Lieutenant von Baerensprung, Dr. Spuhn, an agent and superintendent. This station is expected to become of considerable importance as a trading center.

No. 13.—Masi, on the Pangani, in Usambara.

GEORGE B. GOODWIN,
Consul.

UNITED STATES CONSULATE,
Annaberg, March 21, 1887.

MERCHANT MARINE OF GERMANY.

REPORT OF CONSUL FAY.

According to the official statistics of the German Empire, the number of sailing vessels on January 1, 1886 (no later date mentioned), sailing under the German flag was 3,471; of these 1,688, or 48.1 per cent., were over twenty years in service, whereas in 1881 only 34.5 per cent., or 1,474 out of total of 4,246, had seen the same service; of the remaining 1,783 on January 1, 1886, 21 per cent., or 732, were under ten years in service; in the year 1881 26 per cent., or 1,113, were of the same age.

Of late years the Germans have been building unusually large sailing vessels. On account of bitter competition the freight rates have become so reduced that smaller vessels pay no profits to the owners.

In the year 1885 there were launched 10 sailing vessels of 10,729 register tons; 1 full-rigged ship of 1,506 tons, and 8 barks of 8,192 tons, whereas only 14 smaller vessels were built, with a total of 1,624 register tons.

The building of steamships was limited in the same year to 23 screw steamers, with a total of 10,081 register tons, and 4 paddle steamers of 697 tons. This shows plainly that the measurement of the newly-built sailing vessels exceeds that of the screw vessels which were constructed in the same year.

The considerable saving of large ships in the number of the crew is shown by the following table:

Capacity of vessel (registered tons).	Sailing vessels.	Steamers.
	One sailor required for each—	One sailor for each—
30 tons	11.1 tons	4.1 tons.
30 to 50 tons	14.4 tons	7.7 tons.
50 to 100 tons	16.7 tons	9.5 tons.
100 to 200 tons	22.7 tons	14.6 tons.
200 to 300 tons	28.9 tons	19.8 tons.
300 to 400 tons	32.5 tons	25.8 tons.
400 to 500 tons	35.7 tons	30.2 tons.
500 to 600 tons	39.3 tons	33.2 tons.
600 to 800 tons	43.9 tons	37.4 tons.
800 to 1,000 tons	52.3 tons	41.5 tons.
1,000 to 1,600 tons	60.3 tons	39.5 tons.
1,600 to 2,000 tons	66.5 tons	28.3 tons.
2,000 tons or over	72.1 tons	25.4 tons.

According to this statement about 9 sailors are requisite for a sailing-vessel of 200 to 300 register tons, but a vessel five times the size, namely, 1,000 to 1,600 tons, does not require five times as many men, only 22 being the required number.

If one considers the savings of large vessels in the crew, in the construction of the hull, in the rigging, repairing, &c., it is explainable that in our time of low freight rates these large vessels still leave a profit and, in consequence of it, the building of them has not ceased, notwithstanding the large number already in existence, but is still going on.

The large vessels, as already stated, pay a small percentage on the present rates of freight, whereas the smaller ships cannot compete with them without being the losers, and at the present time there is no probability of an advance in the tariff, which is poor consolation for ship-owners.

Should there be an advance, the cargoes would rapidly decrease, partly because a great many goods cannot bear a higher cost, and partly because the railways are constantly on the lookout to increase their traffic, as they are now, with the present rates, dangerous competitors.

ANDREW F. FAY,
Consul.

UNITED STATES CONSULATE,
Stettin, March 25, 1887.

GERMAN HOP CROP FOR 1886.

REPORT OF CONSUL BLACK.

Nuremberg is the center of the hop trade of Europe, and is probably the largest market in the world for this article of commerce. There is large capital invested, and the store-houses are very extensive, containing all the necessary machinery for curing the hops and putting them into merchantable shape. The chief mart is situated in the center of the city, and there are three market days per week, Tuesdays, Thursdays, and Saturdays, but during the active season, from the 1st of September to the 1st of January, large transactions are completed every day. The goods bought and sold are not confined alone to the Bavarian brands, but include those of all the German states together with the Bohemian varieties.

Quotations are, as a rule, made for 50 kilograms, a German hundredweight, or about 110 English pounds, for cash and without discount.

The weather during the early summer months of the last year was very unfavorable for a large yield, in fact fears at that time were entertained that but a small crop would be gathered; but the month of August proved so propitious with its warm days and nights that the quantity was brought up to about that of the preceding season in a majority of the districts, but the quality was somewhat injured by the very rapid growth the weather engendered.

The early reports concerning the crop in England were very favorable, but the harvest being late, the fruit, before it was gathered, was much injured by frost. While in the United States the situation was entirely changed from the previous year, and instead of having, in quantity and quality, the best crop of all hop-growing countries, it had, in the principal hop-growing sections, an entire failure.

If the harvest had turned out equally as good in all other countries as it did in Germany, it would have proved, perhaps, impossible to have found an outlet for the large amount of hops offered for sale in this market, but the wants of the United States were large, and it took from Nuremberg, during the year 1886, hops to the value of $1,900,955.80, or $1,629,650.13 more than in the year 1885. With such a customer, prices for the best brands were well maintained during the entire season, without the usual fluctuations, and show at the present time a slight improvement by reason of scarcity; but the poorer qualities have been very much neglected, and quotations extremely low, English buyers being the only ones who appear to want them.

Overproduction continues to be the general complaint, and one can appreciate how reasonable it is considering that this year Bavaria alone has over and above her wants an amount equal to about three-fourths of the hops reported consumed by the United States in 1886.

WM. J. BLACK,
Consul.

UNITED STATES CONSULATE,
Nuremberg, February 28, 1887.

Quotations of the leading brands in the Nuremberg market for the following months.

Brands.	Middle September, 1886.		Middle October, 1886.		Middle November, 1886.		Middle December, 1886.	
	Marks.		*Marks.*		*Marks.*		*Marks.*	
Market hops:								
First quality	60 to	65	55 to	62	50 to	60	50 to	60
Second quality	50	55	40	50	30	45	30	45
Third quality	35	40	25	30	18	28	18	28
Mountain hops	50	75	60	70	60	80	60	85
Aichgrund hops:								
First quality	60	70	55	70	60	70	60	70
Second quality	55	60	30	45	45	50	45	50
Third quality	35	45			28	40		
Spalt City hops			150	160	150	160		
Spalt land hops:								
First quality			135	145	135	145		
Second quality	75	80	105	130	100	130	80	100
Third quality	60	75	80	90	80	90		
Wolnzach Au (certificated)			75	95				
Halletan (certificated):								
First quality	90	95	*75	85	80	85	80	90
Second quality	75	80			80	85	60	75
Halletan (without certificate):								
First quality	75	80	*40	70	60	75	60	70
Second quality	65	70			40	50	40	50
Third quality	45	60			27	35	27	35
Wurtemberg hops:								
First quality	75	80	75	85	75	80	80	90
Second quality	65	70	45	70	50	60	50	60
Third quality	50	60			30	40	30	40
Baden hops:								
First quality	70	75	65	75			45	60
Second quality	50	65	45	60	28	40	28	40
Alsace hops:								
First quality	60	70	60	68	28	60	28	60
Second quality			48	55				
Posen hops:								
First quality			50	60	50	78	60	65
Second quality					33	40	33	40

* First quality.

These prices are net for 50 kilos, equal to 110.5 English pounds.

Hop yield of Germany, Austria, and England.

Country.	Acreage.	Yield per acre.			Total yield of a middling harvest.	Total yield 1885.	Total yield 1886.
		Full harvest.	Middling harvest.	Harvest 1886.			
Bavaria.		*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
Upper Bavaria	8,833.1	939	541	630	4,740,000	5,060,000	5,520,000
Lower Bavaria	11,326.3	994	586	630	6,582,000	7,040,000	7,040,000
Palatinate	498.3	939	718	718	354,000	374,000	320,000
Upper Palatinate	4,646.5	807	442	541	2,077,000	2,070,000	2,530,000
Upper Franconia	8,353.4	807	442	442	3,923,000	4,070,000	3,750,000
Middle Franconia	30,720.2	718	400	442	12,376,000	14,960,000	13,700,000
Under Franconia	988.1	807	442	807	442,000	440,000	772,000
Suabia	859.1	807	442	497	386,000	462,000	418,000
Total	66,225	852	502	588	30,680,000	34,476,000	34,060,000
Wurtemberg.							
Neckar district	3,885.5				2,485,000		2,870,000
Black Forest district	8,440.4				4,790,000		5,630,000
Jaxt district	1,291.2				555,000		552,000
Danube district	4,907.9				2,795,000		2,980,000
Total	18,525	851	530	674	10,625,000	13,970,000	12,032,000
Alsace-Lorraine.							
Under Alsace	10,518.4	1,089	829	774	8,707,000	7,290,000	8,230,000
Upper Alsace	613.3	1,492	807	1,348	519,000	585,000	862,000
Lorraine	415.3	2,099	851	851	354,000	408,000	331,000
Total	11,577	1,860	829	991	9,580,000	8,283,000	9,423,000

Hop yield of Germany, Austria, and England—Continued.

Country.	Acreage.	Yield per acre.			Total yield of a middling harvest.	Total yield 1885.	Total yield 1886.
		Full harvest.	Middling harvest.	Harvest 1886.			
Prussia.		*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
Posen	5, 190. 2	718	497	409	2, 353, 000	3, 204, 000	2, 100, 000
Saxony	2, 490. 1	1, 492	897	630	2, 007, 000	2, 983, 000	2, 100, 000
Eastern Prussia	1, 253. 2	994	541	541	696, 000	993, 000	696, 000
Hanover	529. 5	851	508	497	265, 000	386, 000	221, 000
Hohenzollern	453. 6	....	497	541	198, 000	243, 000	243, 000
Hesse-Nassau	401. 5	1, 989	994	1, 050	331, 500	375, 000	375, 000
Western Prussia	121. 6	718	508	586	66, 000	44, 000	72, 000
Pomerania	169. 4	1, 238	630	541	110, 500	110, 500	88, 000
Brandenburg	219. 1	994	497	541	99, 000	110, 500	121, 000
Rhineland	112. 9	994	541	630	60, 000	66, 000	72, 000
Silesia Sleswick	36. 5	1, 094	630	630	22, 000	22, 000	22, 000
Total	10, 977. 6	....	610	600	6, 213, 000	8, 537, 000	6, 120, 000
Baden.							
Karlsruhe district	3, 600	....	807	851	2, 906, 000	....	3, 059, 000
Mannheim district	3, 200	....	774	1, 039	2, 497, 000	....	2, 988, 000
Constance district	760	....	851	994	640, 000	....	660, 000
Rest of Baden	430	....	851	851	364, 000	....	364, 000
Total	7, 990	....	821	934	6, 407, 000	6, 740, 000	7, 071, 000
Grand Duchy of Hesse	124. 2	1, 204	586	740	77, 000	77, 000	88, 000
Kingdom of Saxony	44. 2	1, 094	762	762	33, 000	33, 000	33, 000
Rest of Germany (Meiningen, Coburg, Brunswick, Oldenburg, Anhalt)	224. 6	....	508	497	110, 000	133, 000	99, 000
German Empire	....	....	......	......	63, 725, 000	72, 249, 000	68, 926, 000
Austria-Hungary.							
Bohemia	22, 007. 4	566	365	270	7, 857, 000	9, 945, 000	5, 889, 000
Styria	3, 759. 2	718	497	450	1, 713, 000	1, 768, 000	1, 710, 000
Galicia	3, 350. 6	807	497	492	1, 547, 000	1, 879, 000	1, 653, 000
Upper Austria	1, 635. 8	1, 094	718	740	1, 193, 000	1, 326, 000	1, 191, 000
Moravia	730. 4	1, 994	541	581	387, 000	442, 000	423, 000
Carinthia	83. 2	1, 094	718	670	60, 000	66, 000	56, 000
Rest of Austria	123. 6	....	541	536	66, 000	200, 000	67, 000
Hungaria and Liebenbergen	370. 2	1, 138	674	760	252, 000	298, 000	285, 000
Total	32, 060. 4	....	556	563	13, 075, 000	15, 924, 000	11, 274, 000
England	69, 930	1, 680	994	1. 030	63, 000, 000	54, 255, 000	71, 930, 000

Countries.	Estimated home consumption.	Deficiency to be covered by import, 1887–'87.	Surplus available for export.
	Pounds.	*Pounds.*	*Pounds.*
Bavaria	10, 500, 000	....	24, 560, 000
Wurtemberg	2, 890, 000	....	9, 162, 000
Alsace	885, 000	....	8, 538, 000
Prussia	16, 250, 000	10, 130, 000	....
Baden	1, 210, 000	....	5, 861, 000
Grand Duchy of Hesse	770, 000	682, 000	....
Kingdom of Saxony	3, 310, 000	3, 277, 000	....
Rest of Germany (Meiningen, Coburg, Brunswick, Oldenburg, Anhalt)	8, 050, 000	2, 951, 000	....
German Empire	39, 845, 000	....	29, 081, 000
Austria-Hungary	11, 050, 000	....	224, 000
England	71, 930, 000	....	....

PRODUCTION OF COAL IN RUSSIA AND GERMANY.

*REPORT OF CONSUL FAY.**

In Russia a further rise on the duty of iron is impending, and the owners of the Donetz coal mines have also the prospect that further taxes will be imposed on foreign coal.

The output of Russian coal in 1860 amounted to 10,000,000 poods, or 164,000 tons, whereas it increased in 1885 to 262,000,000 poods, or 4,360,000 tons, of which the Donetz district mined about 2,000,000 tons, the district of Perm 250,000 tons, Poland 1,300,000 tons, Moscow about 500,000 tons, and the balance in the Killo district.

Notwithstanding the enormous increase, the production of coal in Russia only amounts to $\frac{3}{10}$ of 1 per cent. of the total output of the countries named below.

According to Mr. Radzig's report, the production in 1885 in the several countries was as follows:

Countries.	Production.	Per cent.
	Tons.	
England	290,666,600	40
United States	204,919,950	28.2
Germany	130,073,304	17.9
France	34,153,322	4.7
Belgium	31,973,524	4.4
Austria-Hungary	30,519,992	4.2
Russia	4,360,000	.6
Total	726,666,492	....

It will be seen by the above figures that the output of the United States, with its immense area of coal fields, falls far below that of England.

PROTECTIVE DUTIES IN RUSSIA.

By so small a production of coal in Russia one would think that it is a staple article, and that the mines in the Caucasus, in the Ural, in Siberia, Turkestan, &c., could be advantageously worked; but such is not the case, as the output of the Donetz basin of 2,200,000 tons, which consists of nearly 40 per cent. of anthracite, partly remains unpurchased. In the years 1883 and 1884 15 per cent. of the output remained unsold; nevertheless several million fathoms of wood are annually burned.

In order to stop the importation of English coal a duty of 2 copecks† per pood in gold was petitioned for and granted for the ports of the Black Sea, and one-half copeck per pood for the ports of the Baltic; but this had not the desired effect. The English coal could not be displaced, and a higher duty was necessary. Three copecks were granted for the Black Sea ports; but even this duty does not displace the English coal from these ports. Now it is proposed to further raise the duty to 3½ copecks for the Black Sea ports and 2 copecks for the ports of the Baltic. Probably this higher duty will not have the desired effect, because, according to the Riga and Odessa Exchange Committee and the Moscow Technical Society, the Donetz coal is inferior to the English and German; moreover, the cost of producing or mining the coal is greater than is the case in the last-named countries. Russia is still very backward with its technical contrivances in mining.

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* Based upon a work of Herr Radzig.

† A copeck is about two-thirds of a cent.

Mr. Radzig is of the opinion that a further advance in the duty on coal for the ports of the Black Sea would be detrimental to agriculture in the south. Respecting a higher duty for the Baltic ports, the consumption of coal at Moscow would decrease rapidly.

At the present prices of 22 to 23 copecks per pood the consumption of coal at Moscow does not exceed 10,000,000 poods, as many manufacturing industries burn wood, and a higher duty would compel all other industries to use the same fuel, while the Donetz coal-owners would certainly not profit by it. Moscow, with surrounding country, consumes annually about 1,000,000 fathoms of wood, equal to 100,000,000 poods of coal, and the Donetz district could not only supply the manufacturers, but also the owners of houses as well, if coal could be had at reasonable prices, but high prices would induce none to make a change.

English coal, which is far superior to the Donetz coal, is difficult to place at 22 to 23 copecks, whereas Donetz coal at these prices would find no purchasers if an increased duty should be granted.

In order to augment the sales of the Donetz coal the construction of a railroad is contemplated, which will be about 60 German miles in length, the estimated cost of which is 22,000,000 rubles. Mr. Radzig is of the opinion that this road will have neither freight nor passengers to transport, and that the sale of the Donetz coal can only be augmented by the projected canal which is to connect the Azov with the Black Sea. He writes that this canal will be built by a French corporation, with a capital of 25,000,000 rubles. The Azov is very stormy, and is only navigable about sixty days in the year, this being the reason that the cost of transportation of coal from Marinpol to Odessa or Nicolajeu is high, namely, 5 to 8 copecks per pood.

The transporting of coal from Marinpol by canal would probably not exceed 3 to 4 copecks per pood, which would enable the Donetz coal to compete with the English coal.

Mr. Radzig writes that the Donetz coal, because of its bad quality, will never be able to compete with the English article at the Baltic ports, and that only by reducing the railroad freights will it be possible to open up larger markets for it.

Proprietors of coal mines are petitioning for higher duties, but they forget that thereby they ruin other industrial establishments, and that it is forsooth not the task of a government to allow one industry to be benefited at the cost of another, which would be the case if a further duty should be placed on English coal shipped to the Baltic ports.

Russia has two large manufacturing centers, namely, Poland and Moscow, with surrounding districts. The former has good coal in the vicinity, which is mined mostly by Germans. The latter uses wood, or the dearer and worse Donetz coal. The English coal cannot be obtained, because of the high railway rates and the increased duty.

GERMANY'S COAL INTERESTS.

The German coal-owners likewise petitioned the Government to place a duty on coal imported into the Baltic ports, although they produce coal sufficiently low to enable them to compete with English coal abroad. However, thus far no duty has been imposed on foreign coal.

Germany imports a small quantity of coal from England and Wales, but the exportation is merely nominal. Formerly the importation was very large, but now the Germans are quite independent, as the output of domestic coal is sufficient for all needs and purposes.

The quality of German coal in some respects is better than the English, particularly the Silesian product, which is considered in every respect superior. However, some mines produce coal of very poor quality.

There is no duty on foreign coal, but a bounty of 3 marks per ton is allowed on all coal exported.

Coal-miners receive from 2.50 to 3 marks per day, with no allowances excepting fuel. Even at these small wages the owners are not troubled with the so called "strikes"; such a thing is not known. However, they are not satisfied with the pittance they receive for the hard labor, and may show their dissatisfaction in the near future, as they appear to have some sympathy from the coal merchants and others interested in that industry. For instance, I questioned one of the largest coal merchants of Stettin in relation to "strikes." His answer was, "Unfortunately, the coal miners of Germany never struck, although they had sufficient reasons for it if they chose to do so."

ANDREW F. FAY,
Consul.

UNITED STATES CONSULATE,
Stettin, March 21, 1887.

TIN-PLATE TRADE OF SOUTH WALES.

REPORT OF CONSUL JONES.

It is well, perhaps, to point out that for several years past there has been more money lost than made in the tin-plate trade in South Wales. Out of an average of eighty-two works in existence during recent years there have been no less than forty failures; and of the four works named in the Department's circular, namely, Machen, Pontymister, Pontnewydd, and Rhiwderin, three, namely, Machen, Pontnewydd, and Rhiwderin, have failed and are now standing idle. Moreover, the works at Machen and Rhiwderin have come to grief twice during the last five years.

There are a large number of tin-plate works in this district, and the area covered by the various manufactories average from 2 to 10 acres. The materials out of which the buildings are constructed are stone and bricks, with roofs made partly of stone and partly of pantiles. There are no puddling-furnaces in any of the new works, and hence no refining fires or hollow fires.

The principal material now used in the manufacture of tin plates is Siemens and Bessemer steel. Manufactories working the Bessemer material are situated at Barrow, Dowlais, Ebbu, Vale, Tredegar, Rhymney, and some other places. But the larger works, using the Siemens steel bars, are grouped around Swansea. There are, moreover, three large steel works making bars for tin plates on the Siemens principle in that district.

The number of mills in each manufactory averages from two to ten, and the average weekly output of each mill is about 500 boxes. One engine generally works two mills, with cold-rolls and other appliances for completing the plates, and two or three boilers are generally used for each engine. Coal is the fuel consumed. Most of the works here are capable of turning out about 500 boxes per mill per week, and the average would be about 480 boxes for the year. The number of persons employed is about 90 per mill. The total amount of wages paid in the works of three mills would be from £9,000 to £9,500 a year.

Siemens-steel bars are a little dearer than the Bessemer-steel bars, but not very much; the difference is about 5*s*. or 10*s*. per ton. And the price of iron, again, is a little lower than steel bars; the difference, however, is not considerable.

EVAN R. JONES,
Consul.

UNITED STATES CONSULATE,
Cardiff, March 1, 1887.

Tin and terne plate manufactures in South Wales.

[This table is based on 100 boxes, as per brand mark, 14 by 20.]

Articles.	Weight.			
Weight of bars, 14 by 20:	*Tons.*	*Cwts.*	*Qrs.*	*Lbs*
Iron	5	17	2	12
Steel	5	17	2	12
Waste reducing bars to sheets by oxidization and pickling		4	0	0
Waste by scrap		17	0	0
Yield of tin, 100 boxes bright		2	2	20
Yield of tin and lead each, 100 boxes ternes		1	1	10
Coal and coke	7	10	0	0
Vitriol, black and white pickling		7	0	16
Palm oil		1	0	2

Bran, 1*d*. per box; boxes (wood), 4*d*. each; annealing pots, ½*d*. per box; machinery, wear and tear, rent and taxes, management, &c., and office help, 2*d*. per box.

The weight per box is as follows:

	Cwts.	*Qrs.*	*Lbs.*
IC	1	0	0
IX	1	1	0
IXX	1	1	21
IXXX	1	2	14
IXXXX	1	3	7
IXXXXX	2	0	0
IXXXXXX	2	0	21

The extra cost in working IX is the cost of bars used in excess of IC. For instance, IX requires one-quarter of a hundred-weight more than IC. Up to IXX workmen's wages are the same as IC; after IXX the wages are doubled.

Wages paid in the manufacture of tin plates in mills and tin-house.

Occupation.	Wages per 100.			Occupation.	Wages per 100.		
Mills.	£	*s.*	*d.*		£	*s.*	*d.*
Roller, 3*s*. 5*d*. per dozen	1	8	6	Grease-boy, 1*d*. per box		8	4
Doubler, 2*s*. 9*d*. per dozen	1	2	11	Rubbing		6	6
Furnace-man, 2*s*. 7*d*. per dozen	1	1	6	Dusting		5	6
Behinder, 1*s*. 3*d*. per dozen		10	5	Assorting		7	2
Shearer, 1*s*. 1*d*. per dozen		9	0	Reckoning and weighing		0	9½
Opening		7	0	Boxing		4	0
Engine-man (by the day)		4	0	Laborers		4	9½
Pickler, black and white, swilling, &c		8	3	Engineer (see above).			
Annealing		6	4	Overman		4	0
Cold rolling		8	4	Horse and cart		2	8
Bundlers		3	2½	*Millwright.*			
Tin-house.				Millwright and smith		2	8
(Pickling white, dusting, and scouring included in black pickling.)				Furnace-builder		2	0
				Weigher		1	4
Tinning, 3*d*. per box	1	5	0	Smith (see above).			
Washing, 3*d*. per box	1	5	0	Roll-turner		4	0

The same wages are paid in all, or nearly all, the works in this district, as the workmen belong to the union, or Tin-Plate Workmen's Association. There is some difference in the first hands, such as roll-turner and tin-house overman. I have not been able to get the exact sum paid at any one particular works throughout; but these are the ruling prices in all the works in my district. The explanation of one works paying and the other not paying is to be found in the management and construction of the works, and also in the brands, &c. The cost of wages per box amounts, at the present day, to 2*s*. 4*d*., very nearly.

Cost of manufacturing 1,500 *boxes C*, 20 *by* 14.

[One week's make of three mills.]

Materials and expenses.	Weights.			Cost per ton.		Amount.			Cost per box.	
	T.	*Cwt.*	*Lbs.*	£	*s.*	£	*s.*	*d.*	*s.*	*d.*
Steel bars	88	4	13	4	10	396	18	6	5	3½
Coal	112	10	0		5	28	2	6		4½
Castings						9	7	6		1½
Sulphuric acid	5	7	16	3	5	17	8	2		2¾
Tin	2	0	20	104	0	208	18	7	2	9½
Stoves and gas						12	10	0		2
Palm oil	0	16	8	28	0	22	10	0		3½
Rent, rates, and taxes						3	15	0		0¾
Annealing-pots						3	2	6		0½
Wooden boxes						25	0	0		4
Trade expenses and management						7	16	3		1¼
Wages						174	19	5	2	4
						910	8	5	12	1¾
Less shearing	13	0	0	2	0	26	0	0		4¼
						884	8	5	11	9½
Add carriage to Liverpool, 12*s*. 6*d*. per ton										7½
Add free-on-board charges at Liverpool										0¾
Net cost, delivered free on board, Liverpool									12	5¾

Tin plates are usually sold less 4 or 5 per cent. for cash in fourteen days.

WHITE LEAD MANUFACTURE IN BRISTOL.

REPORT OF CONSUL LATHROP.

WAGES.

There is in the west of England but one plant for the production of white lead proper; by which I mean the carbonate, produced by the ancient Dutch process. It is unnecessary for me to enter into any detailed description of so well known a process, so I will only mention that the appliances in this particular works are all of a very old type, and that a proportion, that would be unusual in the United States, of the work is done by hand labor. Wages nominally are 58 cents per day, but a system of piece-work prevails, which differs from those in use elsewhere, and which is claimed to be advantageous for both employer and laborer. A day's work for four men is held to be the setting of one complete layer of each of the materials that enter into the stack, viz, the tan, the acid, the lead, and the flooring. If three men do this work they receive the pay of four men; and when the stack has reached a considerable height, sometimes a fifth man is added at the charge of the employer. The work of the stackers, though severe, is usually entirely accomplished by 1 o'clock, and they are free to go. Such an arrangement is desirable in the interest of the health of those engaged in this deleterious occupation. In the grinding and other departments day wages are paid, averaging all round, including the stackers, $4.85 per week. It is this cheapness of labor which has prevented the utilization to a larger extent of mechanical methods.

COST OF PRODUCTION.

On an average, it is found that 18 cwt. of pig lead will produce 1 ton of white lead. Pig lead in this market is to-day worth $65 per ton; hence there is metal to the value of $58.50 in a ton of white lead, while the expenditure for acid and tan amounts to about $2.16, and for taxes to 48 cents. The interest on capital invested in plant and on that idle during the completion of the slow process of manufacture approximates $3.90 per ton of white lead, and the expenditure for labor is about $8.84. Other expenditures, including renewal and depreciation of plant, cost of barrels, &c., aomunt to about $4.10 per ton of white lead, though this includes nothing for salaries, as in the particular case under consideration the firm have a large staff of assistants engaged in other branches who attend to the white-lead business. The following recapitulation shows approximately the prime cost of a ton of white lead in Bristol:

Metallic lead	$58 50
Acid and tan	2 16
Wages	8 84
Interest	3 90
Taxes	48
Other items	4 10
	77 98

These figures are presented with some diffidence, as they do not purport to be more than a rough statement.

The price of white lead, unground, is about $80 per ton, so that there is little or no margin at present prices.

SOURCE OF MATERIALS.

The cheapness of spent tan is a considerable advantage to the Bristol white-lead manufacturer, and, owing to the number of tanneries, there is a certain and abundant supply. The pig lead used comes either from Germany or else is domestic in its origin. It is essential, of course, to the quality of the product that the pig should be as nearly chemically pure as possible. The slightest trace of copper or silver will seriously deteriorate the white lead. The British and German smelters being in advance of other nations in the practice of their art, their product is largely used by European white-lead makers. For purity the most regular and certain of the English pigs are held to be the W. B. and Snail Beach. These rule something above ordinary prices, and, particularly W. B., are hard to get at present. The metal corroded in Bristol is mostly smelted in Bristol, and comes, or a considerable part comes, from North Welsh mines.

MARKETING THE PRODUCT AND ADULTERATION.

The market for the Bristol white lead is largely to be found in the potteries district of the North, though the manufacturers consume a considerable proportion of their outturn in other branches of manufacture under their control. They sell both dry and in oil. Formerly the grinder took his dry product and ground and mixed it for the wholesale dealer; but the grinder is obtaining each year less of this intermediate business, and the manufacturer is selling more and more of the ground stuff. Dry white lead is worth to-day about $80 per ton. Pure white lead ground in oil sells for about $100 to $110 per ton, with ninety days' time to an unexceptionable buyer. From this maximum price the stuff can be sold down to $50 per ton; the difference in price simply indicating the increased proportion of sulphate of baryta or heavy spar that is introduced. Barytes has no body. On the other hand it absorbs no more oil than the lead, nor does it change color, nor does it, like other adulterants, reduce the coloring matter of the lead. Hence, when not intermixed in excess, it can perhaps hardly be called an adulterant, and some grinders introduce a small percentage into all their white lead, averring that a ton of the mixture at $95 will accomplish all that a ton of the pure at $105 can do. This seems to be the only substance generally used to mix with white lead; though it is certain that if a buyer demanded white lead of the grinder at, say, $50 the ton, there would be considerable whiting in the mixture. But any buyer who pays a fair price can get a fair article, and if he pays a high price he can get a pure article. The different grades of white lead on the market are indicated simply by numbers; No. 1 being pure, No. 2 having a small proportion of barytes, and so on down to No. 5, there being as a rule five grades on the market. The thousand and one fancy names sometimes used to indicate the different grades are unknown here.

THE LEWIS-BARTLETT PROCESS.

The American "Lewis-Bartlett" process for subliming lead has been within the past two years introduced into Bristol, and there is a considerable production of pure sulphate and oxide of lead which seems to be a satisfactory substitute for the carbonate, though it meets with considerable criticism. It is charged against this new pigment by practical painters, first, that it is off-color and has a yellowish tinge; second, that the body is not equal to that of the carbonate; third, that it requires more oil; and, fourth, that it will harden under water, or if not covered by water will absorb moisture from the atmosphere and harden. These complaints were made by several, and I communicated them to the secretary of the new company, who answered:

> One must always allow for a degree of prejudice. I have many times proved that in color we fear no one. A thorough, and, at the same time, a *scientific*, test for covering will disprove what they say. As to its requiring more oil, I think there is some mistake here. A painter when he receives the lead in "paste" will find it does not require quite as much oil as English lead. *In some instances* it does harden under water, but it is no difficulty to keep it under oil. The lead-colored lead is particularly suited to all classes of iron work, as no acid is used in manufacturing and the fear of setting up rust is done away with.

The works of this new company are advantageously situated a few miles from Bristol, having direct railway communication with the interior, and also by water both with the interior and with the ocean. It is not necessary for me to give any detailed description of a process well known in America, and therefore I pass on to the product. Whether from prejudice or because the outturn is really inferior, the new company has not been able, so far as I can learn, to find a good home market at remunerative prices for their lead; a considerable portion of which has consequently been shipped to the United States at prices somewhat unsatisfactory.

White lead has never been imported in Bristol from the United States; whether it could be or not is purely a question of price; and, considering the present depressed price and comparative dullness of the trade, it seems unlikely that we could offer such advantages as would encourage an export trade to this port in this commodity.

LORIN A. LATHROP,
Consul.

UNITED STATES CONSULATE,
Bristol, March 22, 1887.

Importation of lead into the United Kingdom for the year 1885, *and the ports into which imported.*

Ports into which imported.	Lead ore.	Pig lead and sheet lead.	Lead manufactures.
	Tons.	*Tons.*	*Cwt.*
London	2,927	62,268	3,223
Liverpool	3,416	10,008	13,809
Bristol	883	845	
Chester	220	1,442	
Folkestone			40
Gloucester		50	
Harwich			564
Hull		1,934	209
Llanelly	6,683		
Newcastle		18,214	
Newhaven			57
Plymouth		111	
Shields, North		2,844	
Shields, South		6,336	
Southampton	243		
Swansea	12,365	2	
Weymouth	1		19
Other ports of England		15	24
Leith		505	2
Glasgow		2,588	10
Grangemouth		60	38
Dublin		790	105
Total	26,738	108,012	18,100

Importation of lead into the United Kingdom for the year 1885, *and the countries whence imported.*

Countries from which imported.	Lead ore.	Pig lead and sheet lead.	Lead manufactures.
	Tons.	*Tons.*	*Cwt.*
Sweden	6	136	
Germany	463	9,218	14,501
Holland	218	5,822	2,135
Belgium	29	773	70
Channel Islands	1	11	
France	801	1,585	1,147
Portugal	106		
Spain	324	76,556	
Italy	6,690		40
Greece	2,302	8,147	
Turkey	1,375	601	
Algeria	9,854		
Australasia:			
West Australia	624		
South Australia	1,029	77	
Victoria	56	6	
Queensland	819		
New South Wales	276		
United States of America	68	4,989	207
Mexico	9	49	
Central America	1		
United States of Colombia	235		
Peru	529		
Chili	761	11	
Argentine Republic	65	25	
Other parts	7	6	
Total	26,738	108,012	18,100

Production of lead ore and silver therefrom in the United Kingdom in the year 1885.

Countries.	Dressed lead ore.	Amount of lead obtainable in smelting.	Amount of silver obtainable from the lead.	Value of ore at the mines.
England and Wales:	*Tons.*	*Tons.*	*Ounces.*	
Anglesey	....	32	8,800	....
Breconshire	20	14	116	$632 00
Cardiganshire	2,072	1,535	19,954	88,292 00
Caermarthenshire	793	595	8,459	28,615 00
Carnarvonshire	198	150	197	6,861 00
Cornwall	241	160	2,500	9,737 00
Cumberland	2,768	2,127	15,400	108,498 00
Denbighshire	1,321	979	5,042	49,633 00
Derbyshire	4,561	3,407	....	177,568 00
Devonshire	8	1	....	87 00
Durham	11,029	8,499	64,395	406,367 00
Flintshire	2.108	1,601	14,012	87,086 00
Isle of Man	6,868	5,094	132,315	300,208 00
Montgomeryshire	955	726	6,521	40,065 00
Northumberland	4,351	8,194	4,614	131,721 00
Pembrokeshire	1,439	959	9,776	49,006 00
Shropshire	2,529	1,959	....	94,876 00
Westmoreland	1,579	1,095	14,245	53,789 00
Yorkshire	3,129	2,229	....	98,497 00
Total for England and Wales	46,864	34,856	296,346	1,791,037 00
Total for Scotland	4,316	3,243	22,726	188,693 00
Total for Ireland	122	88	1,448	3,844 00
Total for the United Kingdom for 1885	51,302	37,687	320,520	1,983,574 00
Total for 1884	54,485	40,075	325,718	1,954,167 00

The amount of lead obtainable in smelting has been reckoned as 95 per cent. of the amount indicated by the dry assay; thus, in the case of an ore containing 80 per cent. of metal by dry assay, the actual yield has been taken at 76 per cent.

In calculating the quantity of silver obtainable from lead ores the amount of silver in ores containing less than 3 ounces silver per ton of ore has been omitted, as in most cases it is not extracted; and it has been assumed that, on an average, one-fourth ounce silver remains in each ton of desilverized pig-lead.

Quantity of lead produced in the United Kingdom, the quantities imported and exported, and the amount left for home consumption in 1885 *and the previous years.*

Items.	1884.	1885.
	Tons.	*Tons.*
Lead produced from British ores	40,075	37,687
Lead imported and lead obtained from foreign ores	132,829	129,402
British and foreign lead exported	37,631	42,169
Available for home consumption	135,273	124,920

MANUFACTURE OF WHITE LEAD IN VENICE.

REPORT OF CONSUL JOHNSON.

HISTORY.

In a report on the state of trades and industries (*arte e mestieri*) of the city of Venice, presented in the year 1773 to the special commission or board of trade (*deputazione straordinaria delle arte*) the manufacture of white lead is not mentioned. It is certain, however, that two establishments for its fabrication existed formerly in Venice, one under the commercial name of "Rubbi Heirs," the other called the "Societa Veneta," but both had ceased operations before 1830.

Later on, in 1840, Pietro Bizaglio, of Venice, established a factory of some importance and at great expense, adopting processes already tested and improved in other localities. He employed about 45,000 kilograms of lead imported from abroad and 125,000 kilograms of sulphate of barium from Bergamo and the Tyrol. In a short time, however, he was constrained to abandon the undertaking, finding that he could not sustain the competition of factories already established in Carinthia.

The process first employed was that of bending plates of lead into a spiral in such a way that about 1 inch of space remained between the circumvolutions. These spirals were then placed vertically in vases containing strong vinegar. This when exposed to a moderate heat gave off an acetic vapor which attacked the surfaces of the spiral plates and gave a rapid oxidation. The oxide (carbonate) of lead thus obtained was then formed into small cones, and after being fired by exposure to a current of dry air, formed the white lead of commerce.

The method in use afterward, that is, when the manufacture existed in Venice in 1840, was to form the lead into broad thin sheets by casting it when melted into molds which gave it the proper shape and a scaly surface. These sheets were then inclosed in wooden cases and placed over basins containing a stratum of withered and decayed grapes, called "*cibibo*" moistened with a little water. This moisture, when exposed to the heat of stoves properly disposed, sent its acetic vapor into the cases already mentioned containing the leaden plates, and arranged on cords, as articles from the wash are hung out to dry. In these cases, after being hermetically closed for about three months, the oxide (carbonate) of lead was collected, care being taken that in falling it should not amalgamate with the mass of grapes below. The oxide of lead was then mixed with sulphate of barium and a little gum arabic in other vessels in which were prepared the various qualities of white lead known in common here as the "Dutch," "Genoese," "Venetian," &c.

The quantity of white lead produced annually when it was fabricated here, *i. e.*, after 1840, averaged 82,103 kilograms. Before that epoch it is impossible to form a reliable estimate of the annual production, the importance of the factories being unknown.

There exists at present no manufacture of the article either in the city or province of Venice.

MARKETING THE PRODUCT.

A market for white lead does not now exist in Venice. It is found only in localities where the article is produced, as Genoa, Naples, &c. It is dealt in, however, by the color merchants.

The fabrication of white lead was limited to the production of its several qualities in cones and in powder. It was also, as at present, ground in oil or water, or unground.

White lead, as already stated, was manufactured of different qualities; of these eight are recognized as distinct in commerce, with characteristics varying according to the mode of preparation. There is first the ordinary white lead; then silver or Kremser white, which is the pure oxide of lead formed with gum waters into tablets, and which should dissolve completely in diluted nitric acid; then pearl white mixed with Berlin blue, and various other qualities. Zinc white produced in Germany and Belgium should not be mistaken for the white lead of Venice, Genoa, Holland, &c., which consists of the oxide of lead either pure or mixed with sulphate of barium.

The ancient name was "Venetian white," and it continued to be so called, as was called "Genoese white" the article manufactured in

Genoa; "Dutch" (*d'Olanda*), that of Holland, &c., and at present the name varies according to the origin and amalgamation of the article.

RAW MATERIALS.

The lead was obtained from Spain and Carinthia, the sulphate of barium from the quarries in the neighborhood of Trent and Bergamo. The grapes came from the Levant, and the small quantity of gum arabic was easily obtained in Venice. The prices of these materials in Venice, exclusive of precedent duties, are as follows:

	Per quintal.
Lead (pig)	$8 00
Sulphate of barium	1 60
Dried grapes (decayed)	11
Gum arabic	50

The customs duties on the same material coming from abroad are:

	Per quintal.
Lead (pig and fragments)	$0 10
Sulphate of barium	20
Dried grapes (as fruit)	2 00
Gum arabic	free.

The wages of a laborer (when the manufacture existed) was from 35 to 40 cents per day. No reliable information can be obtained concerning the product per laborer and cost of labor per unit.

So far as can be ascertained no American white lead is for sale in this market, nor has it ever been an article of import.

American white lead might be introduced here provided that for price and quality it should be found preferable to the Italian product after paying the cost of transportation together with a general and conventional customs duty of 5 francs or 96.5 cents per quintal.

H. ABERT JOHNSON,
Consul.

UNITED STATES CONSULATE,
Venice, March 15, 1887.

COCA.

REPORT OF CONSUL DU PRÉ.

I have seen so much recently written of coca in newspapers and in medical publications, that I am impelled to report what I have learned of the virtues of this product of South American forests. With leathern straps passing around their foreheads to sustain burdens of 150 or 200 pounds on their backs, I find these lithe, slender natives traversing plains and mountains with greater celerity than the mule I bestride, which travels through the livelong day 6 miles an hour. Native physicians, *élèves* of the schools of Paris, France, concur in assuring me that this extraordinary capacity for endurance of toil and hunger is to be ascribed to the use, by these *viajeros*, of coca. These learned gentlemen say that the coca of the medical dispensary is the product of the elevated plains of Peru. The botanical name of the plant is *Erythroxylon coca.*

USE OF COCA.

Since the days of the Incas this coca has been in common use locally. To-day it is the preferred stimulant and intoxicant of the descendants of the original inhabitants of all these tropical countries, though its consumption is greatest in the equatorial regions of South America. It is deemed indispensable to his well being by every Peruvian. Recently the medical profession in all countries has been induced to study the strange and unique properties and effects of coca. A peculiar force producing nervous insensibility, distinguishes coca when used as a kaloid. It is administered freely to infants, and is the chief intoxicant of men and women. Youths through many days are intrusted with the care of valuable flocks of llamas, having no other sustenance than that to be found in little leathern purses containing coca and its compounds. Indians chew it constantly. Theirs, like the maxillary movements of tobacco-chewers, are incessant. From 30 to 50 graumas are consumed daily, serving, unlike tobacco, both as food and stimulant. Without coca habitual chewers cannot digest food; without it they are unable to ascend mountains, with long, rapid strides, never slacking their wonderful speed through the livelong day. They will not toil without it; without it they enjoy nothing; without it, practically, they cease to live. A traveler who has explored the mountains of Bolivia and Peru in search of gold and silver mines tells me that Indian postillions, using coca freely when driving pack-mules over the roughest roads along the Sierras, even when the "*sorocho*" prevails, outstrip well-mounted horsemen.

Most learned gentlemen, as well as miners from the United States and Europe, who have employed habitual coca-chewers in all descriptions of menial service, as well as in the mines of Central and South America, give unlimited credence to most wonderful stories told of the physical and nervous force and endurance supplied by coca. When, beneath a burden of 200 pounds, he must accompany a *caballero* 100 leagues; when he must watch many hours after fatigue and exhaustion; when an extraordinary expenditure of abnormal strength is required, the Indian only augments the quantity of coca that he consumes.

CHARACTER OF THE LEAF.

A perfect analysis, as I am advised, of the juices of this plant has never been made. Its principal element is the alkaloid "*cocoína.*" The quantity evolved from a given volume, by weight, of leaves of the plant varies with the grade of development and with the state of dryness and mode of curing the leaves. It seems that more than 0.3 per cent. has never been obtained from leaves recently dried.

Its preparation for use is a very simple process. The leaves of the plant are dried rapidly in the sunlight and then subjected to moderate compression in the purses carried by the natives.

The delicacy of the leaves of this plant is almost abnormal, and in this consists the difficulty of preserving and curing them. In its brief harvest time, during the few hours the leaves are exposed to the sun, if rain falls on them they decay instantly, losing at once their volatile virtues. Then it is rejected by the Indians as valueless; and even after it is properly cured if it become humid it ferments in hot latitudes and becomes useless. Even in driest regions many precautions and infinite care are required to preserve it perfectly and render it acceptable to the Indians. It is not strange, therefore, that Europeans experimenting with coca have uniformly failed to give it effects produced in its native *habitat.* It follows that the coca and cocaine of commerce are comparatively valueless. It is best preserved in a double case of wood or tin after being securely wrapped in tinfoil, a quantity of quick-lime filling the space between the interior and the exterior cases. Fresh and well preserved it has a color and taste *sui generis*. It is then deliciously aromatic, and delightful in odors it exudes, but when its life, its electrical force, perhaps, departs, it is horrible to the taste and its odors are nauseating. When coca, a few years ago, was used by the Indians alone, 10,000,000 kilograms were produced annually.

EFFECTS OF ITS USE.

The immediate effect of chewing coca is perfect insensibility of the interior of the mouth. The immediate sensation is that which one would experience when finding that his mouth had become a great void in somebody else's head. I had a dentist apply it when extracting the roots of a molar tooth, and the effect was as described. Indians constantly using coca finally lose the senses of taste and smell. They can eat, without repugnance, most disgusting food, and drink most nauseating drafts. The sensitiveness of the mucous membrane has been destroyed.

When one goes further, and swallows the saliva impregnated with the juice of the coca leaf, a delicious sensation of warmth and of perfect blessedness pervades one's whole being, intellectual, nervous, and physical, and he is lapped in the joys of an elysium.

Taken into the stomach it certainly retards digestion, but begets no inflammation, not even when used constantly. Its action, it seems, is restricted to the nervous system.

To this healthful action of coca upon the organs of assimilation of food or beverage, and to the chemical and nervous or electrical action of coca, physicians here ascribe the perfect soundness of the teeth of the Indian *coqueros*. The oldest coca-eaters have perfect teeth. Sadly worn away they may be, but caries, of which dentists prate so volubly, is unknown.

The Indian *coquero's* (coca-eater's) capacity to endure hunger, or rather the want of food, when furnished with coca properly prepared, is surely extraordinary. Perhaps it neither supplies nourishment nor appeases hunger. It seems rather, as a scientist states, to "silence the voice of hunger" and still the yearnings of the stomach. The nerves conveying to the brain sensations of hunger or of emptiness are stilled to perfect repose. The hollow voice of the void within is silenced; it is made inaudible. Dr. Morens says, "Coca deceives hunger. If the toiling *coquero* does not eat it is because he thinks he eats." In fact as soon as the influence of coca is exhausted and the supply wholly withdrawn the Indian eats ravenously. His stomach, unlike that of the sober drunkard after a terrible debauch, at once discharges its proper functions perfectly. Coca, it seems, only retards digestion and organic combustion.

In doses of 15 to 60 grains coca produces delightful intoxication. Its joys transcend in perfect blessedness all known human delights. A sensation of lightness first supervenes; the air inhaled is zephyrs from angels' wings; there are wild imaginings and fantastic hallucinations and gorgeous visions, and then complete insensibility. It is intoxication without drowsiness, without congestion of the brain, involving a sense of perfect rest. The law of gravitation is suspended and the *coquero* drifts bodily among the stars. Meanwhile the muscular system is stimulated to an extraordinary degree; an intellectual excitement supervenes, enabling the "possessed" of this demon to watch and toil through sleepless days and nights. No dreadful headache or more intolerable nervous prostration follows. The discovery of these facts has induced a few Americans—white people—to test the virtues of coca as a substitute for whisky, and I am pleased to say they like it. In at least one instance, when taken in very large quantities, there followed great acceleration of pulse-beats and of respiration. There were convulsion of the muscles, persistent insomnia, suppression of thirst and hunger, and diminution of secretions of the skin and kidneys. When larger doses were administered painful sensations in the muscles ensued, itching of the skin, and feverish elevation of temperature.

It is the most potent nervine, almost, at man's disposal. Its hygienic properties are disclosed from its "physiological properties," says a Spanish M. D., who adds, that in hot infusion it is the one useful and healthful beverage one can use after dining. Especially is it commended to the feeble, to those who have transcended limits of sobriety in using alcohol. Its virtues should be tested, therefore, in inebriate-asylums. It surely calms nervous excitability of many, and, taken in small quantities, enables one to endure cold and rain and snow, and it enables one to defy great fatigue and restores the forces lost by excesses. It is popularly used for indigestion, for disordered stomachs, for hysteria, flatulency, and colic, and all forms of intestinal disorders. It is used constantly by toilers in mines, and when one reaches the mines after marching several days through forests and over mountains, sustained alone by the use of coca and maize, he is permitted to eat at discretion through four days and have perfect rest. Then he is in perfect health and "fresh and fat," says the writer above quoted.

"*Cocaismo*"—habitual intoxication by use of coca—more easily becomes habitual and incurable than alcoholism or addictiveness to opiates. Its consequences, however, are not yet wholly measured or comprehended. Excessive and constant use of this intoxicant begets, rapidly, moral and intellectual degradation and decay; steady decline is interrupted at intervals by resistless impulses to do most violent and brutal acts. The nature of the father, as perverted by the drug, is transmitted to the child, and the inveterate vice, operating through generations, is said to account for the brutality of races of Indians, the Quichas and Aimaras of Bolivian fastnesses.

L. J. DU PRÉ,
Consul.

UNITED STATES CONSULATE,
San Salvador, February 26, 1887.

SUGAR INDUSTRY OF BRAZIL.

REPORT OF CONSUL-GENERAL ARMSTRONG.

I have before alluded to the precarious condition of the sugar industry of this country, and to the suggestion made in the Brazilian Chamber of Deputies, by a prominent and influential member of that body, that his Government should endeavor to obtain from the United States a reduction in the import duty on sugar, offering in compensation to reduce the duties on American merchandise imported into Brazil.

The sugar merchants of this city recently held a meeting at which there was reached an exposition of the state of the sugar trade, from which it appears that in some of the most important sugar districts of the Empire the planters receive for their raw sugar only from 1 to 2 cents per pound, and that, in the opinion of the meeting (composed of some of the most prominent sugar merchants of this city), "the country is seriously threatened with the total ruin of its sugar industry." It was therefore resolved "to organize an association for the purpose of defending the important interests now in jeopardy," and I observe that one of the articles of the program of this association favors the policy of negotiating commercial treaties with sugar-consuming countries, and "especially a treaty of reciprocity with the United States for the purpose of increasing the consumption of Brazilian sugar amongst its population, since that Republic is in a position to become the principal sugar market of the world."

Brazil at present exports annually from 200,000 to 300,000 tons of sugar, corresponding to about one-fourth of the quantity consumed in the United States. It preserves vast tracts of land admirably adapted to cane culture, so that with remunerative prices and an adequate supply of labor, it could easily furnish all the sugar needed for our consumption beyond what is produced on our own soil, as it already supplies us with the greater part of the coffee which we consume. And, although the balance of trade is now largely against us and the increased consumption of Brazilian sugar would greatly augment the amount of our importations from Brazil, there can be no doubt of our ability to ship to this country merchandise at least equal in value to that which we would receive therefrom, if the Brazilian Government, to save its sugar industry from ruin, should admit our products on terms that will enable us to undersell our European competitors. This we hope to do finally in every case, but a commercial treaty, properly framed, would permit us to accomplish immediately that which must otherwise be the result of many years of toilsome and unremitting labor.

H. CLAY ARMSTRONG,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Rio de Janeiro, February 26, 1887.

THE ANNATTO BUSH.

REPORT OF CONSUL CLAYTON.

The name *Bixa*, which has been given to a genus comprising four species of tropical shrubs or small trees belonging to the natural order *Flacoustiaceæ*, is the native name of the Indians of Darien for one of the species, *Bixa orellana*.

The Brazilian name of the plant is *urucuara*, or plant bearing *urucu*, the latter being the Brazilian name of the pigment known as annatto. The name in *lingoa geral* is the same.

There are probably two species in Brazil, *Bixa orellana* and *Bixa urucurana*, the former being indigenous to the West Indies, but the two are very much alike and it is hard to say which species is grown in the Amazon Valley; probably both are found, but they resemble each other so closely that to the ordinary observer they are undistinguishable.

The species usually considered as producing annatto is *Bixa orellana*. This species is a small tree or large shrub growing from 15 to 25 feet in height, bushy from the root or forming a simple stem. The leaves are broad, heart-shaped, and pointed. The flowers, which are rose-colored or white, and somewhat resemble apple-blossoms, are produced in large bunches on the ends of the young branches. The fruit is heart-shaped, about an inch long, red or greenish yellow, according to the variety, and is covered with stiff prickles. When dry it splits in two, showing the seeds in a perpendicular row on each side. These seeds, which are very numerous, are embedded in a red, waxy pulp. I have never known the plant to be met with growing wild, though one often finds it many miles from any habitation, but it always marks the site of a former house or plantation.

The two species, or perhaps only varieties grown in Brazil, only differ in the color of the flower and fruit, which in the one are pink and red, respectively, while the other has white flowers and greenish-yellow fruit. The coloring matter seems to be of the same shade in both, and I have never seen any appreciable difference between the two kinds in the quantity produced.

The tree is cultivated in the whole Amazon Valley and is always seen around the houses of the Indians. It appears to attain a great age, but never becomes very large; the trunks of the largest I remember to have seen measured about 18 inches in diameter at the base. The wood is light and considered of no value. The tree is subject to no diseases, is not attacked by insects, and birds do not eat the seeds. It grows freely in any soil and no cultivation is necessary, except to shade and keep down the weeds around the young plants until they become well established. The trees must be grown in full sunshine, for if grown in the shade they do not bloom. Propagation is in Brazil effected only by seeds, and the trees begin to bloom when they attain the height of about 10 feet, which is in about three years from the time of sowing. In a cooler and drier climate, where growth would not be continuous, a far longer time would be necessary.

There seems to be nothing in the nature of the tree to prevent its being propagated by cuttings, which would probably root readily in bottom heat, and plants so obtained, following the usual rule, would flower and fruit much earlier than seedlings. The plants also sometimes form many suckers around the parent, making a dense bush with many stems; when this occurs increase could be had by separation, and, as the roots are numerous, fine, and fibrous, transplanting would probably be easy. In Brazil the fruit matures rapidly after flowering, and is ready to gather in about two months; if gathered as soon as mature the tree at once makes fresh growth, and flowers and fruits anew. The practice, however, is to allow the fruit to remain on the tree until wanted for use; it dries, and as the capsule does not readily burst the seeds remain long in good condition. Within a few months the tree is again in bloom, and usually one sees flowers and both immature and dry fruit on the tree at the same time. With the most careless culture two full crops can be gathered every year.

The preparation of the pigment is very simple. The seeds are macerated in water until the pulp, which is readily separated, is removed. The water is then passed through a strainer made of strands of palm to remove the seeds and fiber, and is then evaporated in the sun until the mass becomes thick. This mass is then rolled in leaves, producing roll annatto, or it is evaporated to dryness and made into cakes, producing mass annatto. Sometimes the seed as taken from the pod is simply dried for market and forms what is known as "*Urucu em grão*."

The pigment is extensively used by the Indians in dyeing the threads of hammocks and by the wild Indians for painting their bodies, they mixing it with turtle-oil or the fat of the *peixe-bois* (manatee). In Pará it is sometimes used to give color to cooked rice, but I have never heard of it being so used on the Amazon. An infusion of the leaves drank hot is considered by the Indians a remedy for jaundice.

An American gentleman who has explored the Amazon Valley from Pará to Iquitos, Peru, informed me that he had never seen in any of his travels any systematic culture of the *urucu*, and very little of the said article comes to this market from the territory through which he has passed. He noticed that each house or village had enough trees for the use of its inhabitants, but as far as he observed there was no disposition to make the *urucu* an article of trade. There is a small annual export from Pará which I learn comes from the Igaripe-Meri, distant about a day's voyage from this city, where there were formerly some plantations, but at present there is very little attention paid to the culture, and the plantations are neglected.

The quantity of annatto exported to the United States from this consular district during the last two years amounted to 27,435 pounds, and valued at $6,816.

ROBT. T. CLAYTON,
Consul.

UNITED STATES CONSULATE,
Pará, Brazil, March 16, 1887.

THE ANNATTO BUSH.

REPORT OF CONSUL VIFQUAIN.

The annatto (*Bixa orellana*), called by the natives *achiote*, grows spontaneously around here, but none is raised for exportation from this consular district. It has no marketable value here.

I have seen the plant, which is more of a shrub than a plant, since it grows from 5 to 6 feet high, and obtains a size of 4 or 5 inches in diameter at the stump. It is not wood, however; it is "fibrous." It bears constantly; the foliage and seeds fall off and grow again, all the year around and year after year. It seems to grow best in a sandy loam soil, but is not found above an altitude of 2,500 feet. Where it grows the temperature is never less than 70° F., and reaches 92° in the shade; in the sun, 130° F. In September last, at 12 o'clock m., I put my thermometer in the sun. It was 92° in the shade; in some ten minutes it reached 130°, and remained fixed at that point.

I have a cluster of seeds before me. Many clusters are found on the bush, and each cluster has some twelve pods, and each pod contains about twenty-four seeds. It is not as heavy as wheat, but heavier than barley. I should say it weighs some 54 pounds to the bushel. I am told that one bush furnishes very often one bushel, a most enormous yield considering the size of the seed.

The cluster of pods reminds one of a cluster of cockle-burs. It has the same color, but, unlike this pestiferous bur, it is not persistent in its adherence.

The annatto grows in a dry climate as well as in a wet climate. At least it looks as well now in the dry season (we have not had a drop of rain for four months) as it does in the rainy season, when it rains every day, more or less, and rather more than less.

The natives use the annatto for coloring-purposes. They are very fond of coloring victuals for the table here. It adds nothing, however, to their quality. The Indians use it as a defensive armor against the frisky and still more pugnacious mosquito. They crush the seeds "and anoint their naked limbs with the stuff."

VICTOR VIFQUAIN,
Consul.

UNITED STATES CONSULATE,
Barranquilla, February 16, 1887.

REPORT OF CONSUL-GENERAL ADAMSON.

Annatto is not cultivated here, but is found in its wild state in all the coast districts of this Republic, and it is not an article of commerce here.

My personal acquaintance with the plant leads me to believe that its favorite habitat is within 15 degrees of the equator on the lower lands, in a soil of sandy loam, which is well irrigated for a part of the year, and that it is hardly probable that it would thrive in California, but that it might be expected to flourish south of the frost line in Florida.

THOMAS ADAMSON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Panama, March 21, 1887.

REPORT OF CONSUL CONROY.

Annatto is a species of "red dye," yielded by the pulp enveloping the seeds of the *Bixa orellana*, a shrub which is disseminated through the whole island of Porto Rico. This shrub or small tree may be said to be here of spontaneous growth, for there is no instance of any regular plantation being established, nor of any careful cultivation being given to the plant.

The country working people are fond of having planted near their little homesteads two or three shrubs for the sake of the fruit, which they use as a condiment in coloring and seasoning their messes of rice and other food, in place of saffron or red peppers. The annatto plant in its natural or wild state is a scraggy, straggling bush, which often attains a height of 8 or 10 feet, but no doubt by proper cultivation and judicious trimming and pruning its condition and growth would be much improved, and its producing capacity would be greatly increased.

The annatto plant does not require a rich soil; it rather affects a loose soil, in which there are mixtures of clay, sand, and fine gravel, but at the same time it thrives best where it obtains a certain amount of moisture, with heat and shade.

The plant commences bearing at between two and three years' growth. The fruit is produced in clusters of small pods, covered with prickly hairs somewhat resembling the burrs of horse-chestnut, and are very numerous, so much so that a single bush or shrub will produce 100 pounds weight of fruit. The tree will continue to bear for many years without any care being bestowed upon it.

In case of any attempt being made to form a regular plantation of the annatto it would probably be expedient to sow the seeds in properly prepared beds, and transplant the seedlings when 4 or 5 inches high, during suitable weather, and plant out about 800 plants to the acre of ground.

The dye is prepared by macerating the seeds with the pods in hot water, straining out seeds and husks, leaving the subside, or pulp, to settle. The fluid being drawn off, the sediment or residuum is placed in shallow vessels and allowed to dry gradually in the shade; the action of the solar rays is detrimental, as destroying the fine coloring matter

A very small quantity of annatto is exported from this province, either to Spain or the United States, but no other preparation is given to the article than merely drying the pods in a current of air under shelter from the sun and then packing them in bags or barrels.

There are two kinds of annatto known to commerce, the "flag" and the "roll." The former is more abundant and more generally used; the second is scarce and demands the higher price. Both are preparations from the same raw material.

Annatto is considered the best of all ingredients for the coloring of cheese and butter, and is very largely used for that purpose. I am informed that it is that which gives the fine coloring to the Gloucestershire and other English cheeses. It is also used by dyers for imparting a deep, but not durable or "fast," orange color to silk and cotton manufactures. As previously stated, the exportation from this island of the fruit of the annatto is quite insignificant. The current value of the article in the crude state in which it is shipped is about 4 cents per pound.

As this plant is scattered and grows wild all over the entire island without any care being given to its culture, no true estimate can be given as to the cost of its production. It is gathered mostly by women and children, and disposed of in small quantities at the shops in exchange for provisions and groceries.

EDW. CONROY,
Consul.

UNITED STATES CONSULATE,
St. Juan, Porto Rico, February 28, 1887.

CHINESE AND PORTUGUESE CUTLERY.*

REPORT OF CONSUL FOLSOM.

There has recently been exhibited in the Cutlers' Hall, in Sheffield an interesting collection of Chinese tools and cutlery, and also samples of pocket-knives most commonly sold in the retail shops of Portugal, and a brief description of the same may be of value to manufacturers of similar articles in America.

CHINESE TOOLS AND CUTLERY.

The Chinese patterns were sent here by the foreign office in three lots, viz, implements used in agriculture, from Tientsin and Shanghai; joiners' tools and edge-tools from Swatow, and cutlery and razors from Pakhoi. The object in sending these goods here was to enable local manufacturers to examine them and open up to Sheffield a new market, but the interest manifested on their part has not been great, and doubts have freely been expressed as to the prospect of making a profit at the low prices quoted for the article. Some of the patterns have, however, been copied by local firms, and an effort is to be made to compete for the Eastern trade in cutlery and razors. The attempt has been made heretofore by two or three leading firms, but without much success, for the Sheffield workman is opposed to new ideas or innovations of any sort, and objects to the introduction of patterns with which he is not familiar. Consequently he is not particular about keeping the new work up to the mark in quality, and the manufacturer is the sufferer.

These Chinese articles are finished in the roughest manner and without any regard to appearance; the only idea, apparently, being to produce a blade that will cut, and at the same time possess strength. The wooden handles of the tools and implements look as if they had been hacked out with a hatchet and no finish put upon them. But it is a mistake to suppose that articles of English or American manufacture can take their place, which are merely pretty to look at. The Chinese trade demands an article of worth and durability, and at the same time cheap in price. As one of the British representatives remarks, "Fine finish and polish are quite unnecessary, the only *desiderata* being cheapness and durability."

The razor, of which an illustration is given, looks like a clumsy piece of iron set in a rough handle, but it has a sharp edge and will cut. The price at which it is sold is from 6 to 8 cents. The blade is about

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*Also noticed by Consul Hughes, of Birmingham, in Consular Reports, No. 74, February, 1887, p. 509.

2 inches in length and 1½ inches in width, with a thick, heavy back. The handle is an ordinary twig or branch, in its rough state, in which a shallow groove is cut to receive the blade when closed. A piece of tin forms the ferrule into which the blade is riveted to the handle. The scissors appear to be roughly hammered out, and the bows are so made that they can be grasped by the whole hand. They sell at about 12 cents. A pocket-knife made of brass, with a thin welding of steel on the blade, which is of brass, is a marvel of cheapness, as the price is only 5 cents. A four-pronged hoe made of steel, with an eye welded on, is sold for 25 cents. Another hoe with an iron handle, or socket for a wooden handle, is 11 inches broad by 8 inches long, solid blade, the price of which is about 66 cents. Two picks are shown which resemble American manufactures, except in finish. The smaller sells at 25 cents, and the larger for 70 cents. In both cases the eye is welded on, and the smaller of the two is made of two layers of iron outside a center of steel. Some trowels are exhibited, square at the end and tapering toward the tang, which is drawn out and runs into a rough wooden handle clasped by an iron ferrule. The price of one with a blade 5 inches long by 2 inches broad is 36 cents. A sickle formed from a piece of steel about one-fourth of an inch thick and 3 inches wide costs 23 cents. A few rudely-made hatchets are priced at from 21 to 35 cents each. Chisels are marked from 9 to 13 cents; and a thin, narrow saw-blade sells at 12 cents. Files vary in price with the sizes, the largest being 40 cents each. Several square hammers, which look like a nut, about 2 inches square, are marked at 15 cents apiece.

The British consul at Swatow says in his dispatch which accompanied the tools:

> English cold-chisels and files are very much used here already. Among the miscellaneous tools the broad hoe is universally used. It takes the place of the English, and to a great extent, with small proprietors, of the plow. The stone-cutting chisels, or pointed wedges, are used to a very great extent in this neighborhood, where good granite abounds. Their steel tips are mostly made of imported steel, and stone-cutters pass half their nights in repointing and tempering the basketful of tools blunted by the day's work.

He also suggests that a market might be opened for nails and screws in his vicinity.

PORTUGUESE CUTLERY.

An interesting feature in connection with the exhibit of cutlery sold in Portugal, and sent here by the British consul at Oporto, is the fact that out of thirteen samples, but one only is of English workmanship. The rest were all made in Germany. These pocket-knives vary in price from 5 to 30 cents each, and are finished without much regard to nicety of appearance. The hafts are made of bone or horn, which are ornamented with a crescent and a heart, set in white metal. The blades are, in nearly every instance, square or razor-shaped, and the favorite brand or mark is a fish-hook. The best pattern in the lot for a model is a single-blade knife, 3½ inches long when closed, with a 2½-inch blade, bone handle, and sells for 9 cents.

Should any of our manufacturers think the fields here indicated might be cultivated by them with profit, I have no doubt that samples could be easily obtained through American consuls in China and Portugal similar to those sent here for exhibition.

BENJAMIN FOLSOM,
Consul.

UNITED STATES CONSULATE,
Sheffield, March 28, 1887.

TONQUIN AS A FRENCH COLONY.

REPORT OF MINISTER DENBY.

In 1884 the French colonial possessions in Asia covered 59,964 square kilometers. As a result of the Franco-Chinese war the Republic increased this area, chiefly in Tonquin, to 149,967 square kilometers. The native population owing allegiance to the French flag shows an increase, also, through the addition of Tonquin, of 9,116,642.

This increase in territory and in population has been purchased by France at a cost, as estimated, of nearly 20,000 men, and about 70,000,000 taels in money.

China also contributes to the cost the lives of almost 100,000 men, lost chiefly by disease, and a sum of money scarcely short of 150,000,000 taels.

The natural inquiry arises as to the profit of such acquisitions as compared with the cost. The only results that can be reached are based on conjecture. It is hardly probable that Tonquin, with the poverty and want of civilization of its people, and the unsuitableness of its climate to European constitutions, will ever be to France what Holland's possessions in the south have been to her. A comparison with French Cochin-China affords the best data for an estimate of the future value of Tonquin as a producer or a market. The last return we have from there is the summary for the first six months of 1886.

The import trade, excluding treasure, was worth $7,362,000; treasure $6,368,000, of which $3,640,000 was on Government account. Of these total imports of $7,362,000 France furnished only $1,033,000 in articles for the use and consumption of foreigners. China furnishes more than one-half the remainder, and the Straits have a large share.

The export trade of the same period was $10,895,000, of which nine-tenths was rice. Of this $87,000 went to France.

This showing, though somewhat in excess of the same period for previous years, cannot be considered encouraging.

Tonquin has three times the population of Cochin-China, and is said to be more fertile. The turbulent character of its people, however, and the proximity to the Chinese provinces will necessitate for a long time to come the maintenance of a large military force and the expenditure of sums of money which will probably make the country a drain on rather than an advantage to France. It is claimed that many of the difficulties now met with will disappear on the construction of railroads, and that a great trade with Southern and Western China will follow the Red River to the sea. It is proposed to construct a line of rail from Laokai near Yunnan to Hanoi to obviate the difficulties experienced by junks in the shallow and almost unnavigable headwaters of this stream.

It is, however, incredible that Tonquin can ever be made a profitable investment of the immense sums expended.

CHARLES DENBY.

UNITED STATES LEGATION,
Peking, February 17, 1887.

COMMERCIAL IMPORTANCE OF HIOGO, JAPAN.

REPORT OF CONSUL JERNIGAN.

The commercial importance of Hiogo, Japan, is illustrated by the following tables, showing the different lines of steamers connecting it with the other ports of the world and the tonnage exported to various countries during the year ending November 8, 1886.

The number of lines of steamers actually calling regularly at Hiogo and being in communication with the other ports of the world are four:

French.—The Compagnie des Messageries Maritimes. Mail service semi-monthly. Terminus at Marseilles. This line is extended to Havre, in France, and London.

English.—The Peninsular and Oriental Steam Navigation Company. Mail service semi-monthly. Terminus at London.

German.—The Norddeutscher Lloyd. Mail service monthly. Terminus at Bremen.

Japanese.—The Nippon Yusen Kaisha. Mail service weekly. Terminus at Shanghai. The steamers of this company are in connection with the Pacific Mail and Occidental and Oriental at Yokohama.

Besides these four companies there is another, the Kingsin line, German, which call regularly at Hiogo with an average of eighteen steamers per year, but do not carry passengers or mails.

The ports of call and rates of passage of the French company are as follows:

Ports of call.	Rates of passage.			
	First class.	Second class.	Third class.	Deck.
Yokohama	$16 00	$10 00	$5 00	$3 25
Hong-Kong	50 00	40 00	30 00	20 00
Saigon	150 00	120 00	60 00	38 00
Singapore	110 00	90 00	60 00	38 00
Colombo	240 00	192 00	96 00	60 00
Aden	300 00	240 00	120 00	75 00
Suez	390 00	312 00	156 00	96 00
Port Said	400 00	320 00	160 00	100 00
Marseilles	415 00	332 00	166 00	104 00

Besides the above ports the Messageries Maritimes have connections by means of small steamers of 1,000 to 2,000 tons burden, with Tonquin, Manila, Batavia, Madras, Pondicherry, Calcutta, Madagascar, Mauritius, Bourbon, Mahé, Mozambique, and Zanzibar, all connecting with the main line, some at Saigon, some at Singapore, Colombo, and Aden.

The Peninsular and Oriental Steam Navigation Company have the same service as the Messageries Maritimes, and the two boats of the Japan line call at Nagasaki via the Inland Sea.

The rates of passage by this company are as follows:

Ports.	First class.	Deck.	Ports.	First class.	Deck.
Yokohama	$16 00	$3 25	Suez	$370 00	
Nagasaki	18 00	4 00	Port Said	870 00	
Hong-Kong	45 00	15 00	Malta	400 00	
Singapore	110 00	30 00	Marseilles	805 00	
Penang	130 00		Gibraltar	400 00	
Colombo	225 00		Venice	395 00	
Aden	263 00		London	420 00	

The German Norddeutscher Lloyd* have the same itinerary as the Peninsular and Oriental Steam Navigation Company and the same rates of passage money. Their steamers call at Antwerp, and at Bremen, the terminus.

The Japanese Company Nippon Yusen Kaisha having a regular weekly service to Shanghai, calls at Simonoseki and Nagasaki. The rates of passage are as follows:

Ports.	First class.	Second class.	Deck.
Yokohama	$16 00	$10 00	$4 00
Simonoseki	10 00	6 00	2 50
Nagasaki	16 00	10 00	4 00
Shanghai	35 00	22 00	9 00

The rates of freight by the various companies above named are actually as follows:

To—	Per ton of 40 cubic feet.			Per ton of 2,240 pounds.		
Yokohama	$1 50	to	$2 00			*$1 00
Nagasaki	1 50		2 00			*1 00
Shanghai	3 00		4 00	$2 00	to	2 50
Hong-Kong	2 50		3 00	2 00		2 50
Saigon	8 00		10 00	5 00		7 50
Singapore	7 00		8 00	5 00		7 00
Colombo	8 00		9 00	6 00		7 50
Calcutta	10 00		12 00	6 50		8 50
Suez	12 00		13 00	10 00		14 00
Marseilles	16 00		18 00	14 00		16 00
	£ s. d.		£ s. d.	£ s.		£
Havre	1 17 6		2 0 0			‡2
London	1 10 0		1 17 6			†‡2
Antwerp	2 0 0		2 10 0			‡2
Bremen and Hamburg §	1 15 0		2 0 0	1 15	to	2

* Dead weight.

† Copper or antimony, 15*s.* to 17*s.* 6*d.*

‡ For rice.

§ Same rate for Amsterdam.

Mail steamers.—The steamers calling regularly at Hiogo are, for the Messageries Maritimes Company: Menzaleh, net tonnage 1,273 tons; and Tanais, 1,149 tons. Peninsular and Oriental Steam Navigation Company: Teheran, net tonnage, 1,670 tons; Thibet, 1,671 tons. Norddeutscher Lloyd: Stettin, 1,815 tons. The Japanese Company have no special steamers on the Shanghai line. They change according to the necessities of the service.

Approximate tonnage exported from the port of Hiogo to various countries, from November 7, 1885, to November 8, 1886.

Companies.	No. of vessels.	Hong-Kong.	Shanghai.	India and Corea.	France.	London.
		Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Messageries Maritimes	26	4,691	....	231	1,002	1,213
Peninsular and Oriental Steam Navigation	26	7,535	....	....	....	2,813
Norddeutscher Lloyd	3	280	....	....	....	44
Kingsin line	18	3,335	....	....	4,412	....
Shire line	14	1,387	3,793	....	356	3,809
Ben line	7	59	3,250	....	....	2,361
Nippon Yusen Kaisha	57	....	16,527	1,614	....	....
Sundry steamers via China to America	22	771	9,625	....	....	....
America transshipment at Yokohama	53	....	....	....	....	....
China Merchants' Steam Navigation	4	....	1,941	650	....	....
Sundry steamers	16	3,852	1,394	47	2,016	6,813
Sundry steamers to Australia direct or via Hong-Kong	7	1,743	....	....	....	....
Sailing vessels	10	....	....	....	....	....
Total		23,653	36,530	2,542	7,786	17,053

* Calls at Hiogo only once per month.

Approximate tonnage exported from the port of Hiogo, &c.—Continued.

Companies.	Germany.	Australia.	America.	Sundry ports.	General tonnage.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Messageries Maritimes	....	....	....	10	7,147
Peninsular and Oriental Steam Navigation	....	....	....	74½	10,422½
Norddeutscher Lloyd	515	3	....	27	869
Kingsiu line	9,855	....	....	192	17,794
Shire line	2,177	....	1,273	....	12,795
Ben line	15	....	635	....	6,320
Nippon Yusen Kaisha	....	....	....	342	18,433
Sundry steamers via China to America	....	....	9,725	....	20,131
America transshipment at Yokohama	....	....	12,674½	....	12,674½
China Merchants' Steam Navigation	....	....	....	....	2,591
Sundry steamers	955	41	....	1,500	16,618
Sundry steamers to Australia direct or via Hong-Kong	....	7,305	....	14	9,062
Sailing vessels	....	....	10,951	....	10,951
Total	13,517	7,349	35,258½	2,159½	145,848

Passengers carried from November 7, 1885, to November 8, 1886.

Companies.	Arrived.	Departed.
Japanese Company Nippon Yusen Kaisha	4,426	4,439
English Peninsular and Oriental Steam Navigation Company	489	610
French Messageries Maritimes Company	98	410
Norddeutscher Lloyd	....	38
Other steamers	....	59
	5,013	5,556

T. R. JERNIGAN,
Consul.

UNITED STATES CONSULATE,
Osaka and Hiogo, Japan, March 3, 1887.

KEROSENE TRADE OF OSAKA AND HIOGO.

REPORT OF CONSUL JERNIGAN.

On June 18, 1886, I forwarded to the Department a statistical table* showing the extent and value of the trade in kerosene oil at this post from 1882 to 1885, inclusive. I am now able to bring the tables down to a later date and to show the extent and value of the trade in this article for the year ending December 31, 1886. During this latter year there were imported 1,216,239 cases. This is more than were imported during any of the years named in the table above referred to. The deliveries during the year ending December 31, 1886, amounted to 919,300 cases, and if to this amount be added the number of cases re-exported (26,000) there were, as stock on hand December 31, 1886, 469,739 cases.

I have not been able to get a list of the various brands constituting the deliveries and stocks, &c., but the following table will serve in that respect for all practical purposes:

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*Published in No. 68 (September, 1886), Consular Reports.

Brand.	No. of cases.	Brand.	No. of cases.
Atlantic	886, 163	Chester	48, 839
Weaver	20, 000	Torchlight	35, 000
Stella	35, 000		
Reereess	191, 237	Total	1, 216, 239

It will be seen from the above table that the largest importations and consequently deliveries have been on the Atlantic brand. This brand has ruled in the markets for some time, but whether its supremacy will remain in the future depends, of course, upon the markets, the supply, the respective values, and the caprice of buyers, conditions which render it difficult to speak of a favorite brand except for the time being.

The prices during the year under consideration ranged from $1.71 to $2.05 per case, being an average value of about $1.82. The highest prices were obtained during the latter part of the year 1886, produced by temporary shortness of stocks, and without this favorable condition prices would probably have not exceeded $1.75 per case. There is no oil imported into Japan that can compete with American oil. In fact I am not aware that oil from any country except America has been imported at this port. Petroleum in Japan is not scarce, but Japanese petroleum has not yet been sufficiently exported to be important.

It can be stated without reserve that the prospects for the trade in kerosene oil are good. Consumption gradually grows in Japan, and with general improvement in business, which is now progressing, a large demand for this now indispensable lighting material may be fairly reckoned upon. The oil trade is not entirely free from hindrances and annoyances, but no trade is entirely exempt and favored with perfect immunity. If any hindrances, &c., they are chiefly due to the Japanese tendency to combine in rings in dealing with foreigners and to prevent direct dealings between the importer and any distributor not in the ring. But this hindrance to free trade, which seems inseparable from all Japanese commercial affairs, is not peculiar to the oil business, and is gradually being counteracted by the publishing of trade and market reports.

If there is no unfavorable legislation on the part of the Japanese Government in imposing higher duties, American oil will continue to maintain its supremacy in this market.

The cost of loading oil here is, for storage, insurance, and interest, about 3 cents per case (of 10 American gallons) per month.

T. R. JERNIGAN,
Consul.

UNITED STATES CONSULATE,
Osaka and Hiogo, Japan, February 24, 1887.

RUSSIAN PETROLEUM.

REPORT OF CONSUL BISSINGER.

I present in as complete a form as possible minute data of the quantities exported during the first half of 1886, with especial reference to their destination, carefully compiled from reliable sources, and reduced to gallons on the basis of 5 gallons to the Russian pood (36.113 United States pounds).

Exports of Baku oil products during first six months of 1886.

TRANSCAUCASIAN RAILWAY VIA BATOUM.

Countries to which exported.	Petroleum.	Lubricating oil.	Naphtha residue.	Total.
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*
In January, 1886	3,469,065	1,096,950	....	4,566,015
During five months:				
Algeria	250,000	....	....	250,000
Belgium	487,750	181,000	179,300	848,050
Germany	25,000	106,500	37,700	169,200
Egypt	485,000	....	....	485,000
Great Britain	1,040,000	1,738,000	60,000	2,838,000
France	1,458,400	363,315	297,150	2,118,865
Greece	320,000	....	....	320,000
Italy	1,761,000	228,500	785,300	2,774,800
Austria-Hungary	2,819,730	130,000	1,730,000	4,679,730
Roumania	2,566,220	10,950	12,000	2,589,170
Spain	300,000	....	....	300,000
Turkey	4,961,280	1,250	....	4,962,530
Russia	3,384,240	336,925	91,550	3,802,715
Total	23,327,685	4,193,390	3,193,000	30,714,075

ON THE CASPIAN SEA.

Countries to which exported.	Petroleum.	Naphtha residue.	Naphtha.	Lubricating oil.	Solar oil.	Benzine.	Total.
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*
Astrachan	44,428,335	79,866,200	8,674,845	....	117,115	60,000	133,146,495
Caucasian ports	228,375	449,185	237,100	55	....	....	914,715
Transcaucasian ports	646,015	2,450,715	....	....	....	....	3,096,730
Persia	440,035	106,230	174,725	....	....	....	720,990
Total	45,742,760	82,872,330	9,086,670	55	117,115	60,000	137,878,930
On the Black Sea via Batoum	23,327,685	3,193,000	....	4,193,390	....	....	30,714,075
Grand total	69,070,445	86,065,330	9,086,670	4,193,445	117,115	60,000	168,593,005

By way of comparsion, the following table, disclosing the exports to Astrachan for the first six months in the years 1884 and 1885, is instructive:

Articles.	1884.	1885.
Via river Volga:	*Gallons.*	*Gallons.*
Petroleum	35,327,825	47,749,005
Residue	70,146,620	85,940,360
Crude naphtha	5,892,740	7,074,380
Lubricating oil	2,320,520	2,679,990
Benzine	207,525	23,600
Total	113,895,230	143,467,335

According to this exhibit the exports via Astrachan the first half of 1886 were greater than in 1884, and but little less than the corresponding period in 1885, while the exports via Batoum were appreciably greater than the previous year, owing to decided improvement and increase in the rolling stock, &c., of the Transcaucasian Railway.

As the Russian market shows little disposition to accumulate a stock of petroleum to any considerable extent during the summer months, when there is but little demand for it, and does not begin to lay in its winter supply until the autumn, it is obvious from the figures cited that the Baku oil industry has lately found a much larger foreign market for its products than in past years, and that notably the Russian Baltic provinces participated to a marked degree in the increased foreign export trade.

The facts and figures adduced in the preceding tabular statements would not perhaps in themselves be of great moment to the American petroleum interests, in so far as their relations to mere quantities is concerned, if the products of the Baku wells were simply confined to local consumption and to a nominal foreign trade; but they assuredly appear to me to assume a decided significance when the ultimate destination is considered, inasmuch as that indisputably indicates the real distribution of the products of that industry.

Much has been said and written about the progress this inferior rival to a participation in the trade with the United States in European and other foreign countries has made, and it must surely be conceded that if figures mean anything at all, these exhibits clearly demonstrate that Russian petroleum has found its way into every country in Europe and Asia where it is worth while competing for its market.

The astonishing low price for the raw naphtha at Baku and the great facilities for cheap transportation have made its ready introduction into the markets heretofore entirely controlled by the United States comparatively easy, and that the Russian Government is disposed to do its utmost to encourage the export trade has just again been evidenced by an order promulgated by a committee of the imperial ministry, of September last, decreeing that "tin plates," imported into Russia with the declared intention of being re-exported in the shape of cans filled with kerosene, are admitted free of duty, provided a bond equal in amount to the duty is deposited.

Whether the hold upon the different countries where its low price has forced a market for Russian petroleum is to be permanent, or whether the objection to its bad packing, inferior quality, and consequent increased liability to danger will materially impede its general use, are matters that can only be conjectured for the present.

ERHARD BISSINGER,
Consul.

UNITED STATES CONSULATE,
Beirut, February 25, 1887.

THE RUSSIAN PETROLEUM COMPETITION IN HOLLAND AND IN JAVA.

REPORT OF CONSUL ECKSTEIN.

HOLLAND.

The long-delayed, and, in petroleum-trade circles, much-spoken-of first tank-steamer cargo of Russian petroleum arrived in this port on or about the 17th of February. It consisted of a quantity equal to about 7,000 barrels, which was quickly—in less than twelve hours, as I have learned—transferred by being pumped from the tanks in the steamer Petrolea at the wharf, through a connecting pipe, into the reservoir on shore, close by.

The first sales effected took place at 7.50 florins per 100 kilograms. which price, in consequence of a decline in American, was later on reduced to 7.20 florins.

Consumers, it is stated to me, seem to be satisfied with the quality; and the sales and deliveries, which are estimated to have amounted to about 2,000 barrels in about three weeks' time, would, it is held, have been much greater if the difference in the price between it and the American article had been more significant, as without this there would seem to exist no inducement on the part of the mass of consumers in this country to abandon the use of the American product.

Up to the present the agents here make no offers for future delivery. The manner or condition in which sales and deliveries of the Russian oil are being made, are described to me to be as follows:

American barrels are exclusively being used for the purpose. When filled by the agents, prior to sale, and when desired by purchasers, the barrels are previously repainted, the bodies of them blue and the ends white. After having thus effaced the Standard Oil Company's brand, they (the Nobel Brothers' agents here) place their brand upon the barrels. This, however, is not done in all cases, as purchasers who wish it, or who themselves furnish the barrels, are having them filled and delivered without any alteration, repainting, or restamping of them.

Thus it would appear that while Russian petroleum is not likely to be carried and imported into Holland under the American flag, it would seem to be, to a certain extent, at least, the intention that it shall sail, as it were, under our banner, after being landed or while on shore.

I am not prepared to say whether these practices involve any wrong, legally speaking, whilst, considered from the moral standpoint, they appear to me of questionable commercial propriety, to say the least.

I would further not hesitate to remark that it would be more "noble" if the Messrs. Nobel Brothers would cause their petroleum to be sold and delivered in barrels of their own or agents' manufacture, here as well as elsewhere.

JAVA.

Up to the present the American product held undisputed, peaceful possession of the colonial petroleum market, but according to most trustworthy information which I have just received, a Russian petroleum war, as it were, has been declared, the colonies are now threatened with a regular oil invasion, and it would seem to behoove American producers and exporters of the article, and who are more especially interested in the trade of that section, to muster their forces and make ready to meet the enemy.

If reports speak correctly, as I believe is the case, an arrangement has been perfected between Messrs. Nobel Brothers and one of the principal Java houses (Maclaine, Watson & Co.), the latter agreeing to introduce into the Dutch East India colonies the oil to be shipped to them by the former, in tin cases, and establish as great a demand and trade for same as possible.

A first shipment, consisting of 60,000 cases, is said to be now under way, per steamer, via Suez Canal.

The price for the Russian article is said to be from 10 to 15 cents (Dutch currency) per case lower than the American.

At about the close of last year the article was offered, per steamer via Suez Canal, at 2.85 to 2.90 florins, inclusive of cost, freight, and insurance, whilst at the same time the American article was quoted at 2.92 to 2.95 florins, inclusive of cost and freight only.

More recently 20,000 cases, a sailing vessel's cargo, were offered at 2.80 florins, when at same time the American oil was quoted at 2.95 florins.

I am assured, however, that there exists general doubt whether the "packing" of the Russian oil will turn out or prove to be equally as good and satisfactory as that of the American always does.

Experience had, in this respect, at Bombay, resulted, as I understand, greatly to the disadvantage of the Russian product.

It is believed that in consequence hereof there will be more or less difficulty to dispose of extensive quantities of the oil in the beginning, whilst at the same time it is expected that ere long the required improvements in the manufacture of the tin cans and wooden cases will be accomplished in Russia.

If, then, the difference in the price of about 15 cents per case will continue to exist it will soon be made to appear that Russian petroleum will henceforth be a formidable competitor against the American in the market of Java. Such, at least, is the opinion of parties here who are thoroughly competent to judge the matter.

It is further represented to me that the firm of Maclaine, Watson & Co., above mentioned, with its branch houses at Soerabaya (Fraser, Eaton & Co.), and at Samarang (MacNiel & Co.), is one of the most prominent commercial corporations in Java, and has, on account of its far-reaching connections, special and great facilities to introduce this new petroleum, and create a demand for it, if possible.

Another circumstance mentioned to me, and which is considered likely to operate in their favor, consists hereof: In former years, and for a long period of time, only the "Devoes" brand of petroleum could be sold to consumers of the article, but more recently the mark "Stella" was imported and more or less successfully placed upon the market, so that the mass of the public is no longer, as of yore, prejudiced in favor of the use of just one particular mark.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, March 24, 1887.

RUSSIAN PETROLEUM IN JAVA.

REPORT OF CONSUL HATFIELD.

For the benefit of our purchasers, refiners, and shippers of petroleum oil, I would say that a cargo of refined Russian petroleum is now on its way to this island. This fact has only become known within the past few days, since when I have gathered that the importers are a firm established at Soerabaya, that the shipment is a trial consignment on part of the shippers, and comes by steamer; this last point is, however, not yet known certainly. It is not generally expected that this oil can compete with our product as yet, but the fact that the attempt is being made to gain the Java market is significant of the intentions of the Russian producers; if attended with success, or hopes of it, for the near future, other outlets in the East will also no doubt be sought, if not already found.

A prominent importer of petroleum has stated to me that he anticipated now selling plenty of Russian oil in Java, and it strikes me that, other things being equal, the expense of steam transportation offers the only obstacle to its realization.

In any case this new element of competition in a field where our supremacy is as yet unquestioned, calls for serious consideration to say the least. The fact that the shipment is understood to be a consignment means that its owners, in anticipation of ultimate results, are not unprepared to encounter a possible loss in order to gain a foothold, this being a sacrifice usually attending the introduction of a new article upon an untried market.

The import of refined petroleum oil from the United States into the Dutch East Indies during 1886 foots up the very respectable figures of no less than 2,643,109 cases, of which to Batavia 478,825 cases; Samarang, 493,639; Soerabaya, 1,089,976; Cheribon, 105,685; Fayal and Pekalongan, 227,486; other ports not in Java, such as Macassar, Padang, Bandjermassin, &c., 247,498 cases; figures which need no comment in showing the value of this island as a consumer.

OSCAR HATFIELD,
Consul.

UNITED STATES CONSULATE,
Batavia, February 4, 1887.

TOBACCO MONOPOLY IN PORTUGAL.

REPORT OF MINISTER LEWIS.

On the 29th instant there appeared in the Government journal a royal decree declaring all laws then existing affecting the collection of custom duties on and the manufacture of tobacco in this Kingdom as abrogated on and after the 27th of January, 1887. I annex a copy of the decree referred to, translated from the *Diario de Governo* of the 29th instant.

This is the preliminary step towards the re-establishment of the tobacco monopoly which was abolished in 1863, and the reasons given for this radicial change are to be found in the preamble to the decree. This is all that is officially promulgated on the subject, but it is understood that the monopoly will be offered to public competition at an upset price of $5,000,000 yearly for a term of twelve years, upon which sum a very large advance is anticipated. This sum is somewhat larger than the present yearly revenue collected through the agency of the custom-houses, and it is the belief of the Government that a greatly increased revenue can be secured to the treasury, with less cost of collection, by farming the monopoly as now contemplated.

This decree has the force of law until the new Cortes will assemble, about the 1st of April next, when this and other so-called dictatorial measures will be submitted for approval or rejection by that body and upon which the fate of the present ministry will depend.

E. P. C. LEWIS.

[Inclosure. Translation.]

Decree in relation to tobacco, January 27, 1887.

[General administration of custom-houses. Indirect contributions. First department.]

It having become desirable to modify the laws relating to tobacco in such a manner as not to injure the interests of consumers and to better public interests and to increase the revenue; and as it is indispensable to avoid injury to such existing privileges as have been created by the legislative power: For these reasons I see fit, in conformity with the advice of my council of ministers, to decree the following provisions:

ARTICLE 1. Prepared tobaccos in the custom-house stores at the date of this decree and those which on that day were in transit to the ports of the continent may be cleared at the existing rates of duty until the promulgation of the law which will alter the present regimen.

ARTICLE 2. All tobacco not under the conditions of article 1, and which may be presented for clearance at the custom-house will pay the duty of 3,500 reis kilo, for cigars, and other kinds 4,000 reis kilo.

Solus. The excess of duties fixed by this article over the duties as now existing will remain on deposit to await the decision of the legislative power.

ARTICLE 3. Are declared null from the date of this decree the licenses established by decrees 21st October, 1863, and 22d December, 1864, granted to such manufacturers who may have closed their work more than three months ago, and as a consequence of this fact the cessation of the sale of their products.

ARTICLE 4. Until the definite decision of the legislature the establishment of new manufactories will not be permitted, nor the modification or enlargement of those already existing, or the reopening of those which have suspended production for more than three months.

ARTICLE 5. The Government will give to the Cortes an account of the present decree.

The president of the council of ministers and the ministers and secretaries of state of the different departments will cause this decree to be executed.

Palace, 27th January, 1887.

THE KING.

Countersigned by all the ministry.

LISBON, *January* 31, 1887.

HORSE-BREEDING IN FRANCE.

REPORT OF CONSUL DUFAIS.

I herewith transmit an extract and translation of a book on horse-breeding in France just published by Baron de Vaux, which may perhaps be of some interest to horse-breeders in the United States. The picture it draws of the insufficiency of serviceable horses may be overdrawn. I give it, therefore, for what it is worth.

Not many years ago Colonel Bridgland, then United States consul at Havre, with the special permission of the State Department, imported horses from the United States for the French cavalry service, which, by a serious advance in freights, subsequently became unprofitable. The time may have come again when an equally enterprising man could perhaps advantageously resucitate this trade.

F. F. DUFAIS,
Consul.

UNITED STATES CONSULATE,
Havre, March 22, 1887.

HORSE-BREEDING IN FRANCE.

[Translated from "Les Haras et les Remontes" (Studs and Remounts) in France, by Baron de Vaux. F. Rothschild, editor, 13 rue des Saints Pères Paris.]

During the last twenty years horse-breeding in Normandy has undergone a characteristic transformation. The breeding of the large, heavy carriage horse, though having been profitable enough, as well as of the heavy cavalry horse, which under the Empire furnished the mount of the carabinier, the centgardes, and cuirassier, has been abandoned. The light, vigorous, wiry, docile, fast war-horse is disappearing, and the specimens which are yet to be found go only to show what horse-breeders might have done, and to point out to them the wrong way they are pursuing. Size of the horse is what they are now aiming at at the expense of all other considerations, and the success of the exportation of such horses to the United States is turning the heads of the horse-breeder. North America, Germany, Italy, Spain, and Portugal are greedy buyers of the draft horse, whose quality for this special purpose is incontestable; the prices paid have led the coolest heads astray. The race, by aiming only at size, has undergone a change, the blood is being infused in an inferior class of horses and the result is rather to be regretted.

The great error committed hitherto in the raising of horses lies in the fact that an improvement is relied upon only by the action of the stallion; small farmers have the deplorable idea that any mare is good enough for reproduction, and they generally only keep such mares as are not wanted by the trade or the army. Thus it is that in the best breeding districts at the stations where stallions are serving, 60 per cent. of the mares are unfit for proper reproduction. Hence the result that the horse for army purposes is getting more and more difficult to find; in fact the remounting officer meets only with horses which have been rejected by other buyers, although sometimes willing to concede something to the requirements of the service.

The following data will give an idea of the present condition of things, and they may be relied upon:

The officer of the first remounting district, comprising the depot of Paris and four more in Normandy, received an order in 1885 for 6,387 horses for cavalry service, to be furnished by end of July, 1886. Notwithstanding all his efforts he could not find in this the richest part of France more than 3,532 head, simply for the reason that they did not exist.

Certain details in Normandy show that of 549 horses of the line required, only 247 could be found, and then only by making concessions in the requisites; neither could light horses be found, as in an order for 140 only 97 came forth; 10 horses were wanted for the military riding school, but not one fit for this special service could be obtained; 1.102 light draft horses for the army were wanted, and only 660 could be found. These figures speak volumes. The heavy cavalry horse is disappearing; the light cavalry horse does not exist, and the solid, wiry, and tough artillery horse is getting scarcer and scarcer.

These remarks regarding Normandy apply with equal force to the whole of France. The following notes are taken from the last report of the Superior Council of Studs:

The number of mares served by stallions belonging to the Government was 131,351; the number of those served by stallions belonging to other owners, but approved of by the commissioners, 60,306, making a total of 191,658, which, at the rate of 60 per cent., would produce 114,994 fillies. Admitting a death-rate of 50 per cent. for four years there would remain the number of 57,497 horses produced by superior stallions and by mares of above the average quality. This number is quite insufficient to furnish the 30,000 horses required for the army in ordinary times, by commerce, and for private use, let alone the 60,000 which would be wanted by the army alone to change from a peace to a war footing, and 25,000 more yearly in case of a prolonged war.

There are about 36,000 communes in France, each of which could possibly furnish one horse in war times.

This grave state of things is not to be ascribed to a scarcity of horses in France; on the contrary, this country has relatively the largest number of horses of any country in Europe; her soil is one eminently favorable for breeding them; the most recent statistics giving the number of her horses at 3,000,000, but amongst them all, in times of peace, neither the 30,000 wanted for army, commerce, and private use, nor in war times the 60,000 required to uphold the national honor and to guard the frontier, can be found This is the incontestable fact.

The fault lies in the carelessness and want of foresight of the horse-breeder and the insufficiency of the means and resources employed by him.

THE CLYDESDALE HORSE.

REPORT OF CONSUL UNDERWOOD.

The Clydesdale breed originated in the valley of the Clyde in the vicinity of this city, mostly in the county of Lanark, although there are fine animals which have been bred in adjacent counties.

The excellence of this breed has been obtained by continued care in crossing for about a century. There is a tradition that the original stock came from some Flemish stallions, which were pure black in color; but this is disputed by some authorities. If it were true, the black color is seldom seen now except in the feet, and in the dapples which are almost universal upon the animals.

There are some dappled grays, but this color is not one chosen by breeders. There are also many dappled bays; but the most beautiful, in my judgment, are the dark dappled browns. They often have a white star in the forehead, and sometimes one or more white feet. In size they are generally large, sixteen hands and over, and often weigh nearly 2,000 pounds.

The head of the typical Clydesdale horse is characteristic. The jaw is broad, ending in a not very fine muzzle, with large open nostrils. The eyes are large, sagacious, and mild. The forehead is broad and full between the eyes, but tapers upward toward the ears, which are long and active.

The efficiency of the Clydesdale horse is due largely to his quick movements, and it is the formation of his oblique and massive shoulder which gives the long quick step for which he is so much valued. His endurance, especially upon paved streets and hard roads, is due to the extraordinary solidity of his legs and feet. The forearm is broad, seen from the side; the knee is broad and flat; the sinews below strongly marked; the pasterns sloping, and the foot very large.

Doubtless the fringe of hair from the knee to the fetlock joint has little to do with the strength of the leg, but this marked feature is never absent from the best Clydesdale horse. It is by the fineness and abundance of this long silky fringe and of the fetlock tuft that good judges estimate the purity of blood and the enduring qualities of the animal.

The back and ribs of this horse are not always in keeping with his other good points; and in selecting, care is to be taken to choose one whose back is not too long or hollow, and whose ribs are well rounded and well set. The hind quarters are low set, the thighs muscular, the hocks broad and solid, the sinews firm, and the pasterns sloping. The long fringe of silky hair stands out from the leg.

The intelligence of these animals is well known. They are guided either in the plow or cart without reins, and when called on to exert themselves, do it with a will, as if they were actuated by conscience.

In the streets of this city great numbers are employed, and their size, movement, docility, and fine condition attract the attention of strangers. Those owned by the Caledonian Railway Company, and used in transporting goods to and from the station, are by far the finest working horses I have ever seen.

Large numbers of Clydesdales are sent to the United States for breeding purposes, as the official returns of this consulate show.

FRANCIS H. UNDERWOOD,
Consul.

UNITED STATES CONSULATE,
Glasgow, August 11, 1886.

EXPORTING HORSE STOCK FROM NORTHERN MEXICO.

REPORT OF CONSUL WOESSNER.

According to the latest laws of this State and city, this report is carefully arranged, and contains all expenses which must be incurred by exporters of horse stock from this section.

Many buyers come here from the United States and are very often disappointed because of the exorbitant charges made by the law before the stock can be loaded for shipment; the result is that buyers are forced to offer stock-raisers a very small price for their animals, or else return home without making any purchases.

At present the exporter from this city must pay on each head of horse stock, males, 68¾ cents; females, $1.37½, which includes the State tax, payable at the office of the *jefatura de hacienda*, and the city tax to the city treasurer, separately. The charges are as follows:

	Cents.
On each male:	
State tax	31¼
City tax	37½
On each female:	
State tax	62½
City tax	75

The stock from this section in size is small, the mules especially so, but are very tough, and when put to work generally give good results.

The shipping rates, per the Mexican National Railway, from here to Laredo, Tex., are as follows (United States currency): For one car-load, $43.85; for five car-loads, each $42; for ten car-loads, each $37. Shipments of five and more car-loads the railroad carries through to Nuevo Laredo, Mexico, where it is necessary to employ a custom-house broker to take out the export permit, which costs $1.50 for the lot properly stamped. Only properly licensed exporters and importers can transact business at the custom-house there. Charges in Laredo, Tex., are (import duties, 20 per cent.), for example:

10 horses, at $10 Mexican money=$100 Mexican, at 79 cents=$79 United States currency, at 20 per cent	$15 80
Import permit for the lot	20
Broker's fee for making custom-house entry, say	2 00
State inspection on 50 head or less, per head, payable to the county inspector, 50 head or more, each	05

The estimated duties must be paid or secured by cash deposit before a permit can be issued for the importation of the stock into the United States, and the importer must present to the collector of customs a consular invoice properly certified to by a United States consular officer at or nearest the place where the animals are purchased. When the value of the stock is less than $50, a consular invoice is not necessary.

Animals specially imported for breeding purposes, and not for sale, may be imported free of duty; the requisite oath in such cases must be made before the consular officer at or nearest the place in Mexico where the stock is purchased, and be duly certified to by such officer; this document has its own form, and takes the place of the regular consular invoice. The collector of customs in Laredo, Tex., also must be satisfied that the animals are intended for breeding purposes, and not for sale; he, therefore, calls for such evidence from the importer as will satisfy him, and if such evidence is not produced, it is his duty to prohibit the importation unless the duties are paid.

Some importers have declined to pay State inspection fees, upon the ground that the State has no right to impose any additional tax on imports, and the exaction of State fees have not been pressed in many instances.

It is expedient, expeditious, and economical, though not absolutely necessary, for an importer to employ a broker to prepare his entry for him at the United States custom-house, unless the value of the importation is less than $50; in the latter event he has only to present himself at the custom-house, pay the duty, and receive the permit. The entry must be made by the owner or consignee of the animals; the latter is held to be the owner. The entry of stock for breeding purposes can only be made by the person who imports them for that purpose. Animals cannot be imported free of duty which are intended to be sold for breeding purposes.

If an importer undervalues his stock so that, on inspection by the custom-house officer, the value is advanced 10 per cent., an additional duty of 20 per cent. is imposed as a penalty.

JOHN WOESSNER,
Consul.

UNITED STATES CONSULATE,
Saltillo, Mexico, March 15, 1887.

THE DEPRESSION OF TRADE AND AGRICULTURE IN MEXICO.*

[Translated from the Mexican Economist of November 12, 1886.]

In the number of the Economist of November 5 we occupied ourselves in analyzing superficially the report presented to the secretary of fomento by the Messrs. Crespo and Barroso. We now have before us that signed by the chief of department of agriculture, Don Luis Salazar, and we observe with pleasure that this work is not inferior to the other. In the first place, he has taken care to study the general causes which have produced the mercantile crisis, and the depreciation of silver in Mexico, as well as in the rest of the world, and to suggest measures which may favor the development of production, especially the mineral production, in our country. The second report is confined to the study of the conditions of certain articles produced by agriculture, and to indicate what means must be taken to extend their cultivation and to increase the amount of exportations.

Agriculture, excelling in its multiple productions other sources of public wealth, is scarcely developed in our rich and vast territory. To protect and encourage this branch with liberal franchises would be an inducement and stimulus for the investment of foreign capital in the exploitation of extensive districts to-day unproductive.

The author directs his attention to the protection which ought to be given to those products whose export to foreign countries is already manifest, notwithstanding the multiple obstacles they have encountered in the beginning of their establishment, and divides those products into groups and in the order in which, in his conception, they should receive a protection sufficient for their development, as follows: (1) Breeding of animals, and skins; (2) textiles, henequen, ramie, pita of Oaxaca, ixtle, lechugilla, maguey, organo, jute, flax, cotton, and silk; (3) tobacco and coffee; (4) fruits, wines, and vanilla; (5) woods and zacaton.

Mr. Salazar attributes great importance, and not without reason, to the industry of raising animals and to the traffic in skins, and in order to demonstrate his idea presents abundant data, among them the prosperity which Texas has reached, on whose territory it is calculated there exist 5,000,000 head of cattle, representing a capital of $100,000,000. He believes, at the same time, that if the States of Sonora, Durango, Chihuahua, Nuevo Leon, Coahuila, Tamaulipas, and Vera Cruz, with the rich lands they possess, and in spite of the scarcity of water, should encourage the breeding of herds, methodizing the immoderate exportation which has been made, a success will be obtained in this branch similar to that which Texas enjoys. To obtain that end the author of the report states:

"An industry which contains conditions so favorable for their undertaking can, with little effort, be urged forward by the Government. In fact, it all consists in dividing up in a suitable manner the immense extensions, measured or being measured, forming ample farms, suitable for the breeding of animals, provided naturally or artificially with water by means of artesian wells or tanks, and watched by bodies of troops that are constantly in movement, as a cautionary means of security.

"Said farms under similar conditions can be offered to intelligent colonists, on an equitable basis and for easy acquisition.

"If it were possible to select people for these colonies, none would be more useful than the Swiss, specialists in the industry of breeding of animals, and the English, so well acquainted with the breeding of cattle, and whose hereditary aversion to the North Americans would constitute a stimulus of rivalry advantageous to our national production.

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* Transmitted by Vice-Consul Charles Winslow, Guerrero.

"In the business of breeding animals, the larger the scale that it is carried on the more productive it is; but this requires the possession of extensive possessions, difficult to be attended to by the vigilance, capital, and work of one individual alone.

"From this arises the utility of establishing great societies or companies, whose interests insure economy in the management of the greatest number of animals with a greater profit as a consequence.

"It is now time to put in practice the means of protection, which economically may be thought convenient, to favor the breeding of cattle in Mexico, since the fabulous increase that the production of this branch reaches day after day in the United States will exhaust in a short time the lands sufficient for the maintenance of the flocks, and the surplus will overflow into our frontier States, which possess abundant and cheap pasturage. Let protection be given, and foreign agricultural capital will not delay to cross the river Brabo to establish itself on our territory. The inconsiderate exportation which has diminished our herds can with facility be converted into a current of importation.

"As respects the traffic in hides and skins, I have here the means of facilitating its development.

"As is logical, the impulse which the branch of furriery, may receive will depend, in the first place, on the increase which the breeding of cattle may have in Mexico. Besides the immunities from taxation, the cheapness in the freights of railroads and steamers, and the propagation of the knowledge which will serve to perfect and quicken the methods of tanning, granting premiums to those who distinguish themselves most in this branch, will be so many other stimulants to assist the greater production and exportation."

The part which Mr. Salazar devotes in his study to the textile plants, appears to us interesting. According to the data which he presents, there exists in Yucatan 823 farms producing henequen, which have under cultivation 1,002,905 mecates, or 577,773,280 square varas. Ramie is a plant whose cultivation has been tried also in the Republic, and according to appearances the lands which offer better conditions for its culture are found in Pueblo, Vera Cruz, Aguas Caliente, San Luis Potosi, and Michoacan. Properly attended to the industry of this plant could acquire greater importance than that of the henequen, its market value being greater and its cost of production comparatively less. As regards the ixtle, it is now employed in the manufacture of ropes, &c., but its true future will be found in its application to the manufacture of paper. It is produced in abundance in Tamaulipas, Nuevo Leon, Vera Cruz, Oaxaca, Chiapaz, and Michoacan. The lechugilla is another plant which could be used advantageously in the same manner as the ixtle in the paper industry, it being now employed only and on a small scale for bagging, pack cloths, &c. The principal zones in which it is cultivated are Tamaulipas, Chihuahua, Coahuila, Hidalgo, and Nuevo Leon. The maguey has not been used as a textile material; it is believed, however, that it is susceptible of being utilized for this purpose, care being taken to cure its leaves at the appropriate period of its growth. Another important material, of which at present no use is made, is the organo, a plant which can be employed also in the manufacture of paper. Very few dates exist concerning flax. However, its acclimation has succeeded with sufficiently satisfactory results in Chihuahua, Tlaxcala, Chiapas, and Mexico. Concerning the cotton industry, we find in this report interesting data, which demonstrate the susceptibility of our country to produce sufficient for local consumption without the necessity of importing it from abroad. This plant can be cultivated and is cultivated in Vera Cruz, Tamaulipas, Sonora, Sinaloa, Tepic, Jalisco, Michoacan, Guerrero, Oaxaca, Chiapas, Chihuahua, Coahuila, Durango, and Nuevo Leon.

The following statement shows the importance of the cotton production and industry in Mexico:

Cotton gathered	kilos..	31,774,400
Manufactories of spun cotton and of cotton textures, about		.88
Probable extension of ground employed	hectares..	50 to 60,000
Value		$8,400,000
Spindles	number..	237,890
Looms	do....	9,000
Workmen	do....	11,000
Cotton shirtings	pieces..	318,184
Thread	kilos..	229,540
Printed cottons	pieces..	22,890
Wick	kilos..	35,360

The silk industry also deserves to be considered as of future importance, as it has been proved that the mulberry tree and the silk-worm are easily cultivated on our soil.

The complement of the cultivation, which are the spinning and the consumption, easily found guaranteed. For the first, the protection of the Government suffices, protected by exemptions from interior and exportation taxes during a fixed period; in the gift of spinning-wheels and special apparatuses, and in the concession of premiums to those who distinguish themselves in the production and exportation by the quality and quantity of the silk elaborated.

The clime, the economical workmanship, the abundance of lands appropriated to the planting of mulberry trees, and a near market, are conditions which unite for the favorable cultivation of silk in Mexico, with little sacrifice to the nation.

Referring to the tobacco, Mr. Salazar says: "The production of tobacco in Mexico can be considered localized in the zones of both coasts, but unquestionably the cultivation offers a greater change of development in the States of Tamaulipas, Vera Cruz, Tabasco, and Oaxaca, which count upon lands, and elements already tried, and from which practically they ought to expect an opulence extending its cultivation; to increase the exportation, to-day comparatively limited."

In the region before mentioned are encountered very fertile lands, whose composition has been proved by analysis to be of superior quality to that of the lands in Havana, as in the celebrated Vuelta Abajo; here also the lands and the climate permit the cultivation of tobacco, under the conditions most favorable to give it the exquisite flavor which makes it so much appreciated throughout the world.

These circumstances, and that of the production of Havana tobacco, being every year less, as is believed, owing to the impoverishment of the lands, enable us to be the providers of Paris, London, Berlin, Russia, New York, and even of South America, where the demand increases in proportion as the Havana tobacco diminishes in quantity and quality. One single country, the United States, imports more than 70,000 quintals of leaf-tobacco from Cuba annually.

Mexico finding itself in climateric conditions so advantageous for the cultivation of good tobacco, it is now time to uniform its classes, perfecting and making them known, under their true names, in Europe and the United States.

The coffee plant is produced in Chiapas, Colima, Durango, Guerrero, Jalisco, Mexico, Michoacan, Morelos, Oaxaca, Tabasco, Tamaulipas, and Vera Cruz. To encourage its cultivation and exportation, the author of the report dwells on the following points:

The measures which are to be advised to urge on the production of coffee consist in premiums, according to the quantity and quality of said production. For the exportation it is advisable to free from custom-house duties coffee, permitting at the same time the free introduction of bags, whose re-exportation is guaranteed.

The concession of unappropriated lands under conditions of economical acquisition, and at long terms, would be a greater stimulus for those who promise to plant great quantities of coffee trees, supplying both capital and laborers for the work. Another important branch of agriculture, which can be cultivated with great profit, is the traffic in fruits. Up to the present it has been limited to reduced exportations by the Central Railroad and the maritime route, notwithstanding it is susceptible of an infinitely greater development, having a market near at hand, which would consume all the quantities remitted. In regard to this matter the author says:

"The direct encouragement of this great wealth of the country would cost very little, since the immense quantities of fruits which are produced, of an exquisite taste and unsurpassable quality, do not need great expenses in their cultivation and collection. The facility and cheapness of the ways of communication, and the free transit and exportation of them, are a sufficient protection. Indirectly, it would be advisable to stimulate this branch of production with some fiscal concessions which would especially tend to establish a perfected system of cases for the easy, economical, and convenient transportation of the fruits, and avoid the delays and obstacles to which these are subject in their passage, by official documents and certificates, and which in many cases are a mere form.

"The conservation of fruits in tin cans is another industry capable of producing by itself alone notable incomes in our mercantile movement, and the best assistance which can be lent to favor their consumption abroad is the exemption of duties of transit and exportation, and of those which actually oppress the tin plate so necessary for the cans, their re-exportation being always guaranteed.

"On this account it will be proper to favor it also by the free introduction of sacks, barrels, bags, boxes, and in general of all the objects and materials which serve to preserve and transport the national fruits, if this does not injure other similar industries established in the country, and which effectually satisfy the necessities of exportation.

"The experiments made for the exportation of fresh fruits have failed, on account of the defective packing employed. In July, 1884, there was introduced for the first time in the United States, by the Central Railroad, a considerable cargo of fruits, consisting of plantains, oranges, pineapples, and mangoes, its exporter being the intelligent commissionist of California, Mr. José Arce, established in Mexico since a few years. The excessive charge for freights, the want of skill in packing, and the fiscal delays were so many other motives which caused the enterprise to fail. With these elements, contrary to the spirit of the undertaking, it is impossible to give this business the development of which it is susceptible, and which can give numerous benefits, without the inconveniences pointed out."

To resume, the commerce in fresh fruits, preserved and in sugar, offers a favorable prospect in the market of the United States, whose inhabitants consume every day greater quantities, and of which, under very advantageous conditions, can be their principal providers, by the railroads of Paso del Norte, Laredo, Nogales, and Piedras Negras, as well as by our Gulf ports and by the gulfs of the Northern Pacific of our territory.

In the same category as the fruits, Mr. Salazar considers the wines an industry which has come to acquire a certain importance, thanks to the efforts of the secretaryship of Fomento, which has liberally distributed vine shoots imported from Europe. According to the figures registered in this report, the quantity distributed has been 1,383,954 vine shoots.

Mr. Salazar says:

"It is perfectly proved that we possess appropriate lands in very considerable quantities, that, as well for their altitude above the level of the sea, or rather for their latitude, possess favorable conditions for the acclimation of the vine.

"The official reports rendered to the secretary of Fomento by the inspectors of cultivation confirm the exit reached in the cultivation of the vine in Chihuahua, Zacatecas, Aguas Calientes, and Puebla.

"But more particularly the lands of Paso del Norte in Chihuahua, and of Aguas Calientes have called the attention of the learned inspector, Hermenegildo Barango.

"In fact there are in Pas del Norte above 200,000 vine stocks, whose last crop produced 100,000 arrobas of grapes, of which only 3,000 were sold as fruit, the rest being made into white and red wines, which were consumed in the same state of Chihuahua. In Aguas Calientes the number of plants in production is calculated as 260,000."

I have before me the measures which Mr. Salazar recommends for the encouragement of this new industry.

'For the present we ought not to form the illusion that we can in a short period be exporters of wines, notwithstanding that the clime and soil of an extensive part of the republic are propitious for an incalculable development of the production of the grape in quantity and quality. But the riches which result from the development of vine culture are not on that account inconsiderable, if we consider that they will enable us to reduce our foreign importations.

Besides the cultivation in a certain scale requires the conjunction of much labor of both sexes, and from this results this industry converted into a lever of colonial power.

It also gives an opportunity to other new industries, such as the fabrication of barrels, casks, bottles, corks, &c., which will add their contingent to enriching the country.

The protection which could be imparted to this branch consists, in the first place, in the immigration of colonists proved as experienced in the cultivation, whom it would suit to settle on the farms of those who already have vineyards, making special contracts with the proprietors who will guarantee, with the protection of the Government, their interests and those of the colonists.

The establishment of vineyard stations in the principal places of production of the vine will be very useful to teach pruning and culture, and the fabrication of different kinds of wine susceptible of being produced, co-operating with this to the development of the industry.

Perhaps as a medium of protection, it would be advantageous to add additional taxes to foreign wines that in Mexico are only consumed amongst the wealthy classes.

Also there could be granted, as a privilege, the free importation of machines and apparatus necessary for this industry, and also for the present an equally free importation of barrels, casks, and corks.

In the group of fruits and wines, Mr. Salazar places the vanilla, whose exportation can increase with some greater activity amongst those who cultivate it.

The exportation of fine and dye woods has been, and is even now, sufficiently active, but without doubt could be augmented if there did not exist two causes which obstruct its development.

(1) The fiscal charges that repress it, united to the heavy expenses of exportation. (2) The excessive felling of small trees, whose exportation injures the market of large wood. Besides these exist other causes, which make almost ruinous this traffic, and which originate from the vicious organization of the contracts for cutting, from the failure of the cutters to comply with their contracts, and sometimes in the material difficulties of placing the wood at the port, from the want of rains.

In the opinion of Mr. Salazar the proper remedies to correct the evils enumerated would consist in the abolition of the duty of extraction or exportation, in the creation of ambulatory stations, which, under the command of intelligent leaders, would exercise the necessary vigilance in the felling of woods, preventing with severe penalties the destruction of tender trees, and obliging a constant renewal of the woods, especially near the rivers and brooks.

It would be advantageous not only to levy a duty of one or two dollars for each tree cut on national grounds, but also to stipulate that the cutters plant at least three trees for each one they have cut, and, finally, it would be advantageous to levy additional duties on the woods imported from abroad.

Respecting the zacaton, Mr. Salazar says:

"The zacaton is a wild plant, that is produced in abundance in Huamantla, San Andres, Chalchi comulo, Perote, San Felipe del Obraje, and many other places of the cold climate.

"The actual price in the places of extraction is from $1.75 to $1.88, and the crop can be calculated at 90,000 arrobas annually.

"The development of this plant is imperfectly carried on, and the protection which could be imparted to this growing industry would be to grant certain immunities and premiums to those who introduce machinery adapted for the gathering, cleaning, and cutting of the zacaton. In this manner without doubt we would be able to cheapen the expenses of said industry, and augment the exportation by the facility of consumption."

The learned author of the report concludes thus the ideas which he has manifested in the special paragraphs, which he dedicates to every article of traffic:

"The facility of production of our soil being recognized, and the reasons being explained which make us presume very possible our prosperity, in a period of time not very far off, by only stipulating a decided protection, which will tend to increase the production and exportation of national fruits; to condense the ideas, it is only necessary to recapitulate what are the possible measures of stimulus and protection that it would be convenient to dictate, relationed to so important branches of public wealth as are agriculture and commerce.

"It is not sufficient that nature has endowed our country prodigally with the abundant elements, which it possesses, to produce a multitude of agricultural articles, and especially those before enumerated, in sufficient quantity to supply the principal mercantile centers of Europe and our commerce with the United States. It is necessary that the agriculture and commerce of its products be protected with especial immunities, which will give inducements and security to the capitals which are dedicated to this industry.

"It is proper in the first place to recommend the observance of the decree issued in May, 1868, which expressly orders as follows: 'No State can recover duties for the simple transit of merchandise.'

"The difficulties are infinite which producers and merchants encounter in their transactions, owing to the system of interior custom-houses and excises. Undoubtedly the interior circulation, free and without hinderances, would contribute to the prosperity of commerce.

"One of the great elements for the development of public riches, and very especially for the agriculture and the commerce, is the establishment of ways of communication between the zones of production and the markets of consumption. The geography of our country is extremely accidental, and the private domain embraces extensions so extensive, that there results an almost insuperable difficulty for the transportation of effects to the principal centers of consumption and to the ports destined for their exportation.

"The Mexican Central and Vera Cruz Railway lines have already served very much to develop the general traffic; the lines not even terminated of the National Constructor, and of the Interoceanic, of Acapulco, Mexico, and Vera Cruz, also lend a useful contingent to the local movement of limited regions. But our vast territory demands in a pre-eminent manner to terminate these lines and open other general arteries of circulation, and particularly to multiply these local ways of communication, whether wagon-roads or railroads, whose preservation should be under the charge of the town corporations, or, better even, establish economical railroads of 60-meter width (system of Decauville or any other whatever), for the transportation by cheap freight of the products of each region, and constructed with funds proportioned by the federation, the states, and private persons, within the true meaning of the railroad concessions, it would be useful to reduce the actual tariffs of the working lines, which will really favor the commercial traffic of importation.

"In the railroads, whose concessions for whatever motive have to be modified, and especially in the new concessions which are granted in the future, it is proper to foresee the immunities which ought to be granted the fruits for exportation, although for it the subventions would have to be more liberal.

"As far as possible, and without injury to the interests of the Government, it would be advantageous to remove the contributions which hinder exportation, since this would be a stimulus to attract capitals which would be employed in the enlargement of production. And if to this is added some economical combination, permitting to guarantee for a determinated period of time a moderate rent of the capital invested in the development of agriculture and of exportation, it is evident that the results would be a brilliant future for Mexico.

"For a period as extended as possible, and after suitable study, it would be well to see if the excessive charges on the importation of certain effects and apparatus, which serve for the improvement of agriculture, can be removed.

"The employment of coverings, boxes, bags, &c., suited for the preservation and economical transportation of national products being particularly necessary to conserve the credit of our exportation, perhaps it would be useful to employ the concession ordered in the tariff, permitting the free introduction of boxes, barrels, sacks, bags, and tin plate necessary for the object indicated, the re-exportation being always guaranteed in a sufficient time, if it does not injure new industries that may be established expressly for the construction of good coverings, boxes, bags, cans, &c.

"It would be advantageous to induce the governments of the several states, studying their peculiar interests, not to impose inconsiderate taxes on the new agricultural interests which may be established, neither on those already established, to the end that they should receive the increase of which they are susceptible.

"The foreign capitals which dedicate themselves to the development of agriculture ought to be attracted by concessions of national lands, bestowed in every case at moderate prices, and to be paid for on long terms, facilitating thus their acquisition.

"Equally, some national lands, suitably divided into different plantations and economical constructions, can be distributed, all made by contract, to receive foreign agricultural colonies, whose numbers prove they have knowledge and elements of work. That distribution of lands, once producing, will facilitate notably the establishment of colonists, and that these can in a relatively short period of time indemnify the Government for the value which they have received.

"Premiums can be created for those who, in virtue of previous regulations with the Secretary of the Interior, supply with water the regions devoid of it, whether by means of artesian wells or tanks, and whose premiums will be in proportion to the volume produced, the scarcity of water in the locality, and the superficial extension benefited. In the premiums granted to those who construct tanks the relative amount of the capital invested will besides be taken into account.

"It would be proper to grant premiums to agriculturists who, in a certain scale, produce articles appropriate to be exported. These premiums can consist of those ordered in the law of colonization to colonists and companies, or in the donation of machines perfected for cultivation. Also, with the premiums, the exportation ought to be stimulated in a certain scale, granting in a determined grade pecuniary or honorary recompenses to those who distinguish themselves with this motive. Said premiums could be for a fixed quantity, or for interest on the capital invested, payable in both cases with paper denominated 'warrants in favor of the exportation.'

"The Government would regulate the form and proportion in which said paper would be received, whether in the payment of certain taxes, or of duties of importation, which foreign effects originate introduced into our ports.

"The establishment of warehouses of deposit for foreign merchandises, conformably to what is ordained in the tariff of maritime custom-houses, would be one of the most important advantages that the commerce could obtain for its development. Equally it would be proper to establish them for merchandises exported.

"Exportation will be much favored by exempting from the duty of tonnage not only steamers and sailing ships which arrive with ballast in our ports to load national effects, but also said sailing ships which come with cargo and return exporting our products. This concession is of vital importance to our exportation, if it is taken into account that on one part the enormous port duties, and on the other the insecurity of our anchorages and bays, increase enormously the freights of the products of the country exported. At the greater part of our ports of exportation steamers do not arrive with freight, for the reasons before expressed, and because the delay in the act of loading and unloading causes prolonged and expensive sojourns. It is advantageous, then, to grant the concession which is indicated, to the sailing ships, making it known in the most ample manner in Europe and the United States.

"The establishment of permanent museums of our national products in the Mexican consulates abroad would be the most efficacious and economical manner of making known the vital forces of production of our country.

"By this means we would be enabled at the same time to combat the very frequent fraud of presenting the Mexican products as proceeding from other countries."

The report terminates recommending the establishment of agricultural banks for lending money, and calls attention to the German systems introduced by Raiffeisen and Schulz-Delitzch for the fomentation of agriculture on a small scale, and the "Agricultural Credit of Hungary," an eminently beneficent institution, that has lent valuable services to the agriculture in that country. Applying the general principle to our country, Mr. Salazar says as follows, with which he closes his interesting and useful work:

"In Mexico, as in other parts agricultural credit encounters a double obstacle: the want of special legislation, and the rooted customs of the country people.

"The farmers do not like to ask for money lent, since according to their mode of thinking the application for credit is a sign of difficulties and entangled business.

"If they see themselves obliged to contract a debt, even though it may be for an advantageous operation, they conceal it as much as they can, although they have to pay the secret at the price of a more elevated interest, as though if it were known they would lose the estimation of the rest. This prejudice created in the mind of the farmers is easily eradicated, with only time and the exact knowledge of the risk incurred, with the concurrence of foreign capital. Also, the merchants and the artisans had in another time the honor of not working but with their own capitals.

"The personal condition of the farmers, taken as a mass, is inferior in instruction to that of the merchants and artisans; they are less apt to comprehend and manage the paper, as of trustworthy value, which is the indispensable instrument of credit. But ways remain open to the farmer to guide himself commercially, if the efforts of the Federal Government and of the States tend to develop the primary instruction for the diffusion amongst the rural populations of the economical elements and of the natural sciences, without which agriculture is condemned to be no more than a routine in our country.

"Bringing to a close what has been said, it appears useful to study the general thought contained in the anterior lines under two phases. The first is to introduce amongst the country people the use of loans, with the object of improving cultivation and augmenting production. The second is to establish the basis of agricultural credit, making movable the capital of the farmer, without hindrances which cause him embarrassment in his transactions.

"The creation of a great financial establishment, instituted guaranteeing to offer sums of money exclusively to agriculture, under very moderate terms, will be the accomplishment of the development of this element of public riches.

"With these measures and those which are dictated in harmony with those for the protection of mining and colonization, we will have succeeded in guiding the capacity of traffic of the Republic to a distinguished position amongst commercial nations."

Judging of the reports we have examined, that of Messrs. Crespo and Barroso, and of Mr. Salazar, the whole pamphlet published by indication of the honorable secretary of fomento is destined to lend great and positive services to all the industries of the country, showing them the most practical means of developing all the sources of national riches, so that the effects of a mercantile crisis as that which we now suffer from will be less felt in the future.

M. ZAPATA VERA.

TRADE OF MEXICO WITH THE UNITED STATES.

REPORT OF VICE-CONSUL WINSLOW.

I forward the inclosed list of the exportations of the principal American products from the United States to Mexico for the month of August, 1885 and 1886, and the sum of the exportations for the months of July and August for the same years.

It will be seen that the exportation of raw cotton to Mexico for the month of August, 1886, was reduced to $713 from $69,361 for the corresponding month of 1885. This is probably owing to more cotton being raised in Mexico than formerly, and that at this rate, instead of importing cotton, Mexico will in a few years export it.

Of cotton cloths the United States exported to Mexico, in the month of August, 1885, to the amount of $52,581, and in 1886 but $39,517. This may be owing to the fact that new factories for cotton cloths have been established here and Mexicans are depending more on their own manufacturers.

Of corn there was exported to Mexico from the United States for the month of August, 1885, $80,845 worth, and for the same month of 1886 but $43,602.

Of tobacco the United States exported to Mexico for the month of August, 1885, the value of $15,107, and in the month of August, 1886, but

$3,160. This falling off can be accounted for by increased acreage of land in Mexico devoted to the cultivation of tobacco and the increased use and quality of Mexican tobacco.

In the month of August, 1885, the United States exported to Mexico steam engines to the value of $32,886, and for the corresponding month of 1886 to the value of $22,138.

In sewing-machines there was a falling off in the value of exportations from the United States to Mexico for the month of August, 1886, compared to that of August, 1885; also of agricultural implements, refined sugar, sheep, lard, butter, cotton manufactures, and tallow.

There was an increase in value of exportations from the United States to Mexico for month of August, 1886, as compared with the month of August, 1885, of the following articles, viz: Charcoal, flour, printed publications, lumber, petroleum, and railroad cars.

From July 1 to August 30, 1885, there was exported from the United States to Mexico of the principal American products the value of $726,843, and for the corresponding months of 1886 but $535,762.

These figures go to show that the importation of many articles by Mexico from the United States is decreasing.

CHARLES WINSLOW,
Vice-Consul.

UNITED STATES CONSULATE,
Guerrero, Mexico, March 19, 1887.

Exportations from the United States to Mexico for the month of August, 1885 *and* 1886.

[Principal American products.]

Merchandise.	1886.		Values, 1885.
	Quantities.	Values.	
Raw cotton .... pounds..	6,624	$718	$69,361
Agricultural implements	....	797	3,108
Refined sugar .... pounds..	56,784	5,534	6,775
Charcoal .... tons..	2,456	6,552	2,846
Pork meat	....	....	16
Head of sheep	6,905	9,158	32,959
Cotton cloth .... yards..	676,348	39,517	52,581
Flour .... barrels..	1,371	8,706	7,846
Printed publications	....	5,558	2,786
Hops .... pounds..	611	139	136
Lumber	....	7,041	4,909
Corn .... bushels..	81,116	43,602	89,845
Sewing-machines	....	5,046	5,891
Steam-engines	....	22,138	32,886
Lard .... pounds..	167,409	13,826	15,667
Butter .... do....	3,586	670	1,631
Cotton manufactures	....	6,451	8,025
Petroleum .... gallons..	160,691	19,059	12,694
Tallow .... pounds..	61,671	3,454	5,918
Tobacco .... do....	30,500	3,162	15,107
Railroad cars, &c	....	8,218	1,166
		204,336	362,653
From July 1 to August 30	....	535,762	726,843
Total	....	740,098	1,089,496

DAIRY EXPERIMENTS IN DENMARK.

REPORT OF CONSUL RYDER.

I present a report on the experiments which have been carried on under the auspices of the Danish Government in relation to the ice-cooling of butter during its stage of repose in the dairy, as well as under its transport by rail and steamer.

At the experimental laboratory experiments have been made in the two last summers on the effect upon butter cooled by ice between the time of its manufacture and of its sale in the English markets.

Some have held that preserving butter in somewhat highly ice-cooled chambers tends to injure and not improve it, whenever at any later stage it might be exposed for a few days to ordinary summer heat.

In the experiments to test this matter the several butter samples have been judged in this country by three Danish butter experts of high repute, whilst in London and in Newcastle the samples were adjudged by members of three butter-trading firms of high standing. The butter used in the experiments, consisting altogether of 94 half-firkin casks, was the produce of the most noted dairies in the Kingdom, in every case prepared and treated at each dairy by the dairy-women of the place precisely as was the general usage of the dairy. At least two samples of identical make were taken, of which the one was retained and transported in an uncooled chamber, as had hitherto been customary, whilst the other was preserved and transported in ice-cooled chambers.

Three days before the judgment should take place the butter samples which had been preserved in the ice-cooled compartment were removed to the cellar chamber, where they were placed side by side with the other class of butter samples there deposited, so that the whole of the butter on the day of adjudication should have the same temperature.

As regards the experiments made in 1886, it may be mentioned that for these ice-cooled boxes were provided, into which the iced samples were deposited the moment they were made ready, and they remained in these boxes during their stay in the dairies as well as being transported by rail and steamer to the places where the judgment should be pronounced, Copenhagen, Newcastle, or London.

The butter with destination to England was forwarded on a Thursday afternoon, arriving in Newcastle on the Sunday following, and was discharged on Monday either into the warehouse cellars at that place or were forwarded by rail to London, where they would arrive on the following morning, and were placed as speedily as possible in the warehouse cellars. In London as well as in Newcastle the ice-cooled samples were laid side by side with the cellar samples two days before the adjudication took place.

OBJECTS OF TEST.

Under the plan of these experiments, the following points were mainly in view: (1) Whether the iced samples, after two or three days' repose in an ordinary butter-cellar, could then be considered of greater, equal, or less merit than the cellar samples; and (2) whether the ice-cooled samples, though they might appear to be perfectly good shortly after their removal from the iced compartments, would nevertheless be found to deteriorate rapidly, more rapidly than the cellar samples, after standing under an ordinary temperature.

There have been held in all four series of experiments, and the following table shows the results:

Series.	Place.	Iced sample.		
		Number times better.	Number times equal.	Number times worse.
1	Copenhagen	23	0	1
2	Copenhagen	55	5	0
3	London	10	5	3
4	Copenhagen	57	3	0
	Newcastle	41	15	4
	London	28	0	2
	Altogether 252 times	214	28	10
	Expressed in percentage, giving	85	11	4

The following figures denote the average proportional adjudged values in all the experiments for each ice-cooled or cellar sample:

Award.	Ice-cooled.	Cellar sample.
First	100	97.4
Second	100	94

The results of these experiments may thus be summarized:

(1.) That the ice-cooled samples, after standing over from two to three days in the butter-cellars, at a temperature of from 15° to 19° C., have steadily been found better than the cellar samples.

(2) That the ice-cooled samples, after having further laid over for about a week in the same cellars, have still maintained their ascendency over the cellar samples.

This result has only been attained by keeping the ice-cooled samples in an iced condition from the time when they were prepared in the dairies and until two to three days prior to the day of award; and whenever both dairies as well as the trains and steamers are provided with properly-arranged chambers, the cooling will then most surely contribute towards raising and upholding the reputation of Danish summer butter on the English markets.

The experiments would also appear to have repelled the theory that a more frequent communication between Denmark and England would increase the market for butter, inasmuch as in 28 comparisons made between "newest" and "oldest" butter, the difference being seven days, the "newest" butter has in 25 cases and the "oldest" only in 3 cases been awarded the first place; it was also shown that the difference between "newest" and "oldest" was less visible in the ice-cooled than in the cellar samples. The reduction in value was nearly twice as much for the cellar samples as for the ice-cooled.

Under the third and fourth series of experiments, observations were taken of the temperature of the water, air, and butter store-rooms on board of the steamers. It was shown from these that the butter storeroom on board the steamers, even if in part below the water-line, does not possess such favorable conditions of temperature as to occasion no other means of obtaining a greater degree of cooling.

Experts in the butter trade were sent from this country to Sweden and ascertained that once a week a train on the Swedish main lines is dispatched provided with refrigerated wagons for butter. The temperature of these Swedish ice-cooled cars closely approximated to that of the cooled boxes used here in the experiments just described. There can therefore be no difficulty in procuring such a temperature for daily practice.

Supposing that refrigerated compartments are not arranged in the trains and steamers, an extreme course of cooling in the dairies will undoubtedly prove of great benefit, as butter is so bad a heat conductor that a cask of the size of one-third barrel, after having been cooled to about 0°, is found to resist the destructive effects of a high temperature for a much longer period than an uncooled cask.

In this refrigerating system one circumstance may arise which should not be overlooked: Dealers may find a greater difficulty in detecting any defects in the ice-cooled butter. The cooling may, for this reason, place the butter trade upon a less safe basis.

HENRY B. RYDER,
Consul.

UNITED STATES CONSULATE,
Copenhagen, *December* 18, 1886.

FRENCH DUTIES ON CEREALS.

REPORT OF CONSUL MASON.

After more than a year of agitation and discussion the act increasing the present duty of 3 francs per hundred kilograms on wheat imported into France to 5 francs was yesterday finally adopted by the Senate. The new law will be promulgated and take effect immediately. Its final enactment has been generally anticipated since its passage by the House of Deputies nearly a month ago, and its immediate effect upon the breadstuffs market has been therefore discounted and prepared for.

A similar amendment, to raise from 8 francs to 10 francs per hundred kilograms the import duty on flour, is under consideration, and its adoption is deemed probable, since otherwise the enhanced duty on wheat would stimulate the importation of flour, and thus be prejudicial to the interests of French millers.

The measure which was finally adopted yesterday has been the most important theme of debate during the present session of the Assembly. The increased duty has been advocated in general by two classes of deputies, viz, those who represent agricultural constituencies and those who have felt that the revenues of the Government were in such condition as to demand this final sacrifice—a tax that would increase the price of bread. It was generally opposed by deputies and senators who represent sea-ports and purely industrial communities. The members of both houses from Marseilles, Bordeaux, Havre, and the mining and factory districts did their utmost to avert a law which would add half a cent per pound to the cost of the laborers' bread and lay a check upon the cereal traffic of the sea-ports, canals, and railways of France, but they were outvoted, and the increased duty on wheat has apparently come to stay.

During the same period the House of Deputies has voted to advance the duty on oats from 1½ francs per hundred kilograms to 3 francs; but, on the other hand, it has refused to impose any duty on Indian corn, which remains, as it has been hitherto, on the free list, as a raw material.

The reasons for this apparently contradictory policy with respect to oats and maize are as follows: Oats are grown quite extensively in France, and an increased duty would not only yield a considerable revenue, but would stimulate still further the culture of that cereal. But corn is not cultivated at all, except in three or four departments, and has of late years been imported largely both as food for cattle and for the manufacture of alcohol. It is doubtful whether maize could be profitably grown on more than a very small part of the area of France, so that to levy a duty on a product thus limited would be to increase the price of corn, and thus discourage the better feeding of hogs and cattle, and at the same time have the effect of putting an increased bounty on the culture of the sugar-beet for alcohol manufacture. But beet culture is already sufficiently protected by the high import duty on raw sugars, which has raised the beet-sugar product of France to 298,407 tons per annum and caused great alarm to the French colonists and the importers and refiners of cane sugar. Accordingly, maize will continue to be admitted free as a raw material for stock-feeding and the distilling of alcohol.

It may be of interest to examine briefly the probable effect of these several changes in the French tariff upon the imports from the United States.

The new law raises the former tariff of 15.8 to 26.3 cents per bushel on all wheat imported into France. This, at the present value of American wheat, would be equivalent to an ad valorem duty of more than 28 per cent. on the raw material of bread, and it is not surprising that the bakers in many French cities and villages have already advanced their prices from 8 cents per kilogram to 9.

Estimated on the basis of last year's imports, the present tariff on wheat would yield a revenue of about $14,300,000 per annum, an important item in the French budget.

The far more serious question, however, is whether the increased duty on wheat will have the promised effect in encouraging a larger home product and thereby restrict and gradually diminish imports. It is not believed by those best informed on the subject that the enhanced tariff will have any immediately serious effect of this kind. French people of all classes are remarkable eaters of bread. Carefully prepared statistics show that the average annual consumption of bread by each inhabitant of Marseilles is 214 kilograms, or 460 pounds, against only 151 pounds of meat. Whatever else they may lack, the French people, rich and poor, must and will have bread, so that it is not the rate of duty, but the extent of the home wheat product and the consequent deficit, which will in future, as they have in the past, determine the amount of wheat imported. It has been predicted and promised by the advocates of the new tariff that it would encourage the French farmers to increase their wheat acreage and, within a period of seven years, make this country self-supporting in respect to breadstuffs.

While it is likely that it may in time have more or less effect, the influence of the new law upon wheat growing will necessarily be slow, and in the end probably disappointing.

The law of March 28, 1885, which raised the wheat duty from 12 cents to 58 cents per hundred kilograms (that is from about 3 cents to 15.8

cents per bushel) was passed with the same protective purpose, but it has had thus far no appreciable effect on the home wheat acreage or crop. The harvest of 1886 yielded 43,000,000 bushels less than that of 1885, and the opponents of the increased duty have pointed eloquently to the present distress of French industry, and predicted that, without sensibly relieving the farmers, it would lay a grievous and burdensome tax upon the laborers' food. The fact will probably be found about midway between the expectations of extremists on both sides of the question. There will be, no doubt, after this year some increase in the area of wheat planting, which in very favorable seasons may raise the aggregate product to nearly the 340,000,000 bushels which this country annually consumes; but, during unfavorable and even average seasons, there will still be left a large deficit to be filled by importation.

Much of the land which for ten years past has been used for wheat growing belongs by right to the far more profitable business of grape culture. The farmers have sowed grain only because mildew and phylloxera had destroyed their vines. Now that the latter and principal of these pests has been circumvented by artificial submersion, or the planting of American vines, the wheat fields of the past decade are being reconverted into vineyards, and no 5 or even 10 franc duty on wheat will check this return to the most lucrative culture of which French soil is susceptible.

France imported during the year 1886 33,426,500 bushels of wheat, of which 11,068,000 bushels came from the United States. At the port of Marseilles the receipts during the same year were 17,948,000 bushels, of which 1,686,300 bushels were supplied by the United States, 6,555,700 bushels came from Russia, 963,000 bushels from Turkey, 4,324,800 from British India, 719,200 from Roumania, 3,536,700 from Algeria, and the remainder from various other countries. The anticipated adoption of the advanced tariff has not seriously checked importations, and there are at this moment several cargoes afloat from New York and San Francisco for entry at this port under the new duty.

From what has been said above respecting maize, it would seem probable that there may be in future an increased French demand for American corn, which in point of quality ranks first in this as in other markets.

At the present moment, however, a sharp and fatal competition is offered by maize of an inferior quality from the Danube, which, since the spring opening of navigation in that quarter, has been forwarded in large quantities, and is now offered afloat in Marseilles docks at 11 francs per hundred kilograms, freight and insurance included, while American corn, under the same conditions, costs 15 cents per hundred kilograms above that figure. This disparity of market values is probably only temporary, as the Danubian supply is limited and its quality inferior to that of the American maize. It would appear natural that the enhanced cost of wheat bread would increase the consumption of untaxed and cheap maize as human food, but so conservative are the French people in all that concerns their diet and drink, so devoted are they to wheaten bread, that it is not probable they will accept any substitute, however advantageous in point of cost or nutritive qualities.

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Marseilles, March 26, 1887.

NOTES.

Ramie culture in Spain.—Her Britannic Majesty's consul at Barcelona writes as follows:

Agriculturists in the Gerona district have lately been turning their attention seriously to the cultivation of the ramie plant, commonly called China grass, I believe. For some years past, in consequence of the destructive inroads of the phylloxera and other pests among the vineyards, and of the increasing importation of cereals from America and elsewhere, the cultivation of the vine and cereals has ceased to be as profitable as formerly in that part of Gerona, and finding that the climate and soil are in every way suited to the cultivation of this grass, and that the few essays that have been made have resulted in success, a factory for decortication has been erected near the plantation, its inauguration, although created and carried out under foreign (French) auspices, having been attended by the notables of Catalonia. Hitherto the roads from the above district have been but dry beds of torrents, which prevented conveyance of produce to any distant market. Now it appears the roads are to be leveled and made passable. It is said that this plant is destined to replace not only the hemp and flax which are imported from France for the manufacture of textiles in Barcelona, but even cotton. The plant at present grown belongs to the family of the *Urticaceæ*, and grows to a height of from 60 to 90 inches. It is essentially a textile plant, and two cuttings may be made in the year and cultivated under good conditions. A hectare would grow from 3,000 to 10,000 kilograms of stalks. At present there are few or no reaping-machines in that part of Spain; but as labor is cheap the weeding and pulling of the crop are done without much expense.

The plantations at Torroella de Montgui, the district of Gerona in question, have an extent of 130 hectares; but there is land disposable for the culture extending over 3,000 hectares. The price of ramie to-day is 10 pesetas [8*s.*] the 100 kilos. There are three decorticating machines at work, moved by a steam engine of 15 horse-power. It decorticates 215 kilos of stem in twelve hours, from which are obtained 43 kilos of thread, requiring but two workmen to manage each machine—one to introduce the stalks and the other to receive the fiber—and the expense is 12 pesetas [50 cents] per 150 kilograms of thread per diem. The society to which the plantations and factories belong is the *Société de la Ramie Française*, founded in 1882, with a capital of 3,360,000 francs.

The advantage of the ramie over other textiles rests in its great resistance to wear, three times greater than that of hemp, and from its greater length is more flexible, and has the property of color, assimilating itself to silk.

The following shows the conditions of the fiber of this plant in comparison with other textile productions:

Textiles.	Length.	Width.	Thickness.	Resistance.		
				Attraction.	Rupture.	Torsion.
	Meters.	*Millimeter.*	*Millimeter.*			
Ramie	0.50	.6	.07	100	100	100
Linen	0.05	.3	.03	25	66	30
Hemp	0.05	.5	.03	36	75	95
Cotton	0.06	.4	.05	12	100	400
Silk	1.00	.2	.01	13	400	600

The thread produced can be manufactured into the following articles, viz: Blonds, white cloth, mixed cloths for curtains and hangings, the punto cloth, the finest blankets and flannels, equal to that manufactured from Swiss wool.

Flowering bulbs and immortelles in the district of Marseilles.—Consul Mason, of Marseilles, writes as follows under date of March 22, 1887:

It seems to be unknown to most American florists and seed dealers that Southeastern France, particularly the department of Var, in which Toulon is located, is a leading source of supply for flowering bulbs, such as the hyacinth, tulip, and narcissus.

An examination of the record shows that there were produced during the past season, in the neighborhood of Toulon and Marseilles, more than 5,000,000 flowering bulbs, as follows:

Hyacinths:	
Early White Roman	4,000,000
Early Blue	50,000
Tender Rose	150,000
White Italian	50,000
Narcissus:	
Paper White (*Lotus albus*)	500,000
Constantinople or Double Roman	150,000
Lilium candidum	250,000
Anemone fulgens	100,000
	5,250,000

Of this immense product the larger part has been exported to the United States, one dealer, who operates exclusively for the American market, having purchased more than two-thirds of the entire crop of last season. But for commercial reasons a certain mystery is woven about the origin of this merchandise.

The American demand is for "Dutch" bulbs, and, accordingly, a large part of those grown in this district are either sold to exporters in Antwerp and Amsterdam or are shipped via those ports to the United States in order to give them the appearance of Dutch origin. So far is this regard for appearances carried that some American importers insist that their correspondents in this district shall not only ship their bulbs via Holland and Belgium and so manipulate their consular invoices as to conceal their real origin, but they even require that these Southern French bulb-growers and dealers shall refrain from advertising their business in the United States. But notwithstanding these subterfuges the business of bulb-growing is profitable and rapidly increasing in this section, where the culture of immortelles is rather on the decline.

Two reasons are assigned for this. The first of these is the fact that in the departments of Var and Gard, where immortelles have been cultivated for generations on the same dry, gravelly slopes, the soil has become fatigued and the plants degenerate in vitality. Consequently the yield of the two or three last seasons has not been up to the mark of former years. But the most serious fact that affects the immortelle industry is the substitution, during recent years, in this country at least, of artificial wreaths and *couronnes*, made of glass, wire, and porcelain, which subserve more cheaply, because more permanently, the purposes for which immortelles were formerly exclusively used in memorial decorations.

In consequence of this the value of immortelles has declined, notwithstanding the diminishing supply, to about half the price of ten years ago, and the culture is no longer profitable.

Trade of Belgium in 1884, 1885, and 1886.—Consul Robertson, of Verviers and Liège, transmits the following under date of March 10, 1887:

Importations and exportations of wool and woolen goods into and from the Kingdom of Belgium during the years 1886, 1885, *and* 1884.

Description.	Importation.			Exportation.		
	1886.	1885.	1884.	1886.	1885.	1884.
	Kilos.	*Kilos.*	*Kilos.*	*Kilos.*	*Kilos.*	*Kilos.*
Woolen yarns	846,706	980,680	832,396	11,212,871	9,379,388	8,911,288
Wool	38,397,170	43,802,074	36,417,409	*92,949,492	96,109,308	78,027,630
Woolen fabrics.	*Francs.*	*Francs.*	*Francs.*			
Cloths, cassimeres, &c	3,350,999	3,002,929	2,798,875	1,349,978	1,439,942	1,382,191
Coatings, duffils, &c	1,745,225	1,901,578	2,484,905	258,774	214,406	228,305
All other light fabrics	15,029,200	17,043,455	15,741,401	465,341	895,896	608,502
Clothing	7,865,900	8,665,971	8,376,294	8,424,270	8,156,493	7,491,523

* These figures represent what are considered in the commercial tables as goods in transit.

The customs duties on woolen fabrics imported during the year 1886, amounted to 2,000,318 francs, or $386,061.37.

Importations and exportations of coal and coke into and from the Kingdom of Belgium during the years 1886, 1885, *and* 1884.

IMPORTATIONS.

Whence imported.	Coal.			Coke.		
	1886.	1885.	1884.	1886.	1885.	1884.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Germany	261, 105	387, 241	438, 578	12, 501	13, 241	21, 423
England	293, 141	305, 441	298, 284	1, 166	3, 355	1, 323
France	166, 540	123, 112	78, 673	5, 206	4, 595	8, 818
Holland*	281, 266	421, 663	408, 124	2, 529	903	1, 249
Miscellaneous	231	22	32	....	....	....
Total	1, 002, 283	1, 237, 449	1, 223, 691	21, 402	22, 094	32, 813

* Nearly the entire amount given as reported from Holland, really comes from England or Germany.

EXPORTATIONS.

Destination.	Coal.			Coke.		
	1886.	1885.	1884.	1886.	1885.	1884.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
France	3, 878, 433	3, 998, 350	4, 340, 259	733, 887	752, 837	772, 927
Holland	148, 844	129, 737	120, 034	....	....	....
Grand Duchy of Luxemburg	....	....	....	148,680	87, 803	77, 802
Miscellaneous	245, 944	40, 243	158, 899	25, 054	8, 086	3, 529
Total	4, 272, 721	4, 338, 330	4, 619, 192	907, 621	848, 726	854, 256

Production, in tons, of coal, iron, and steel in the Kingdom of Belgium during the years 1885 *and* 1886.

District.	Coal mines.		Blast-furnaces.			
			Kind of castings.			Total production.
	Number in operation.	Total production.	Mouldings.	Pig-iron.	For steel.	
Second six months:						
First division	75	6, 534, 561	540	158, 278	....	158, 728
Second division	62	2, 276, 116	27, 864	82, 618	76, 382	186, 864
The entire Kingdom	137	8, 810, 677	28, 814	240, 866	66, 382	345, 592
First six months, repetition	140	8, 442, 467	44, 680	245, 186	61, 652	351, 518
Entire year, 1886	140	17, 253, 144	72, 994	486, 072	138, 034	697, 110
Totals for year 1885	150	17, 437, 603	75, 417	509, 137	128, 322	712, 876

District.	Iron works.			Steel works.	
	Kind of product.		Total production.	Castings, ingots, &c.	Forgings, rails, plates, &c.
	Rails and plates.	Sundries.			
Second six months:					
First division	24, 596	144, 823	169, 419	....	....
Second division	33, 009	35, 716	68, 725	70, 025	61, 086
The entire Kingdom	57, 605	180, 539	238, 144	70, 025	61, 086
First six months, repetition	55, 095	176, 783	231, 878	69, 190	68, 332
Entire year, 1886	112, 700	357, 822	470, 022	139, 215	129, 418
Totals for year 1885	103, 087	366, 162	469, 249	155, 012	125, 461

The movement of cotton in Europe.—Consul Catlin, of Zurich, writes as follows under date of March 1, 1887:

The following tabulated statement, showing the stock on hand, importations, and consumption of cotton in Europe, from October 1, 1885, to January 31, 1887, has been kindly furnished me by Mr. Eugen Zeiz, a competent and well-known cotton agent of this city:

Kind.	Stock on hand Oct. 1—		Imports from Oct. 1, to Jan. 31—	
	1885.	1886.	1885–'86.	1886–'87.
	Bales.	*Bales.*	*Bales.*	*Bales.*
American	462, 840	306, 730	1, 973, 610	2, 805, 380
Brazilian	50, 040	30, 720	69, 970	109, 480
Egyptian	49, 350	19, 270	223, 650	257, 540
Levantine	4, 330	7, 444	20, 240	20, 660
West Indian	30, 400	28, 070	21, 450	18, 110
East Indian	149, 800	222, 660	130, 440	170, 920
Total	746, 260	614, 890	2, 439, 360	2, 882, 090

Kind.	Consumption from Oct. 1 to Jan. 31—		Stock on hand Jan. 31—		Imports from Feb. 1 to Sept. 30—	Consumption from Feb. 1 to Sept. 30—
	1885–'86.	1886–'87.	1886.	1887.	1886.	1886.
	Bales.	*Bales.*	*Bales.*	*Bales.*	*Bales.*	*Bales.*
American	1, 727, 170	1, 738, 800	708, 780	873, 310	2, 310, 350	2, 712, 400
Brazilian	74, 230	100, 350	45, 780	39, 850	110, 840	125, 900
Egyptian	201, 540	208, 450	71, 460	78, 360	169, 020	221, 210
Levantine	18, 070	22, 300	6, 500	5, 800	33, 600	32, 660
West Indian	20, 980	19, 910	30, 920	26, 270	51, 400	54, 250
East Indian	211, 820	248, 340	68, 420	145, 240	1, 168, 490	1, 014, 260
Total	2, 253, 760	2, 333, 150	931, 860	1, 163, 830	3, 843, 700	4, 160, 670

Prices in Liverpool on the 10th of February, 1886 and 1887, were as follows:

Quality.	1887.	1886.
	d.	*d.*
Middling, Orleans	5¼	5
Middling, Upland	5⅛	4 15/16
Good fair, Egyptian	6¼	5 11/16
Good Broach	4 11/16	4 5/16
Good Dhollerah	4¼	4⅛
Good Oomra	4 5/16	4⅜

"In case," concludes Mr. Zeiz, "the American crop does not exceed 6,200,000 or 6,300,000 bales, as is now variously estimated, prices will undergo no perceptible rise during the present season."

Petroleum in Greece.—Consul Moffett, of Athens, writes as follows, under date of February 3, 1887:

A shipment of petroleum, consisting of 6,200 cases, to the order of the Greek Government, for the petroleum monopoly, has just been received at the Piræus from the Black Sea, and is now being discharged into Government depots. The cases are of exactly the same size and form as those imported from the United States, but there are no marks other than those in Greek of the monopoly.

This first importation of Russian oil is a trial order merely, and the cases are to be distributed among buyers as an experiment. If the oil proves to be satisfactory, as compared with the American oil, undoubtedly other shipments will follow, as the freight from the Black Sea is so much less than from the United States.

The total consumption of petroleum in Greece last year was about 150,000 cases, all of which was imported from the United States.

If American exporters are not willing to lose their hold on this market, immediate steps must be taken to reduce the cost of transportation, and, I would add, TO IMPROVE THE QUALITY of the oil sent here.

Free ports in British West Indies.—Consul T. J. McLain, jr., of Nassau, N. P., writes as follows under date of March 26, 1887:

By order of the governor in council, the following places have been made ports of entry of this colony between the 20th day of April and the 20th day of August, 1887, viz: Arthur's Town and Port Howe, in the island of San Salvador; Tarpum Bay and Gregory Town, in the island of Eleuthera.

This temporary arrangement has been made for the convenience of fruit-vessels desiring to clear for United States ports during the pineapple season.

The wine trade of Bordeaux for the years 1884, 1885, and 1886.—Consul Roosevelt, of Bordeaux, writes as follows, under date of March 10, 1887:

Notwithstanding the plagues that continue to devastate the vineyards of France the commerce in wine does not retrograde, but on the contrary yearly increases.

The following tabulated statement shows the importations and exportations of wines at Bordeaux during the last three years:

Countries.	1884.	1885.	1886.	Total.
Importation in casks.	*Hectoliters.*	*Hectoliters.*	*Hectoliters.*	*Hectoliters.*
Algiers	1	2	13,348	13,351
Austria	42,512	48,863	104,962	196,337
Belgium	93	33	37	163
England	981	1,861	1,421	4,263
Germany	165	78	378	621
Greece	2,701	1	1,306	4,008
Netherlands	53	62	58	173
Italy	79,829	37,853	172,844	290,026
Norway	7	3	11	21
Portugal	256,725	695,389	1,026,768	1,978,882
Russia	....	....	600	600
Spain	478,105	307,654	449,358	1,230,117
Switzerland	7	9	8	24
Turkey	252	1,816	32,689	34,837
Uruguay	....	....	43	73
United States	1	51	18	70
Other countries	102	347	131	580
Total	856,614	1,093,022	1,803,980	3,753,616
Importation in bottles.				
Algiers	....	3	1	4
Austria	4	4	....	8
Belgium	7	2	10	19
England	78	87	88	253
Germany	24	28	25	77
Netherlands	40	41	29	110
Italy	1,455	1,005	1,400	3,860
Portugal	167	111	287	565
Russia	1	....	....	1
Spain	870	1,005	226	2,101
Switzerland	4	15	20	39
Turkey	....	....	1	1
Uruguay	....	1	....	1
United States	4	11	1	16
Other countries	19	11	36	66
Total	2,673	2,324	2,124	7,121
Grand total of importations	859,287	1,096,856	1,806,104	3,760,757
Exportation in casks.				
Africa	10,803	9,540	12,955	33,298
Argentine Republic	314,487	252,503	329,728	896,718
Belgium	73,640	78,805	62,482	214,927
Brazil	18,049	11,580	14,513	44,142
England	171,723	185,067	173,030	529,820
Germany	190,063	209,687	175,094	572,844
Netherlands	70,925	76,047	74,584	221,556

Countries.	1884.	1885.	1886.	Total.
Exportation in casks—Continued.	*Hectoliters.*	*Hectoliters.*	*Hectoliters.*	*Hectoliters.*
Russia	9,470	7,906	6,022	23,398
United States	24,390	32,820	32,068	89,278
Uruguay	80,613	72,910	87,951	241,474
Other countries	166,496	123,931	279,253	569,680
Total	1,130,659	1,058,796	1,247,675	3,437,130
Exportation in bottles.				
Argentine Republic	5,551	6,037	8,992	20,580
Brazil	2,287	3,705	2,780	8,772
Cuba	110	37	241	388
England	36,390	38,315	39,066	113,771
Netherlands	2,114	5,647	2,338	10,099
India	1,256	891	1,108	3,255
Peru	1,840	458	1,307	3,605
United States	10,414	10,198	10,824	31,436
Other countries	36,233	30,929	34,173	101,335
Total	96,195	96,217	100,829	293,241
Grand total of exportations	1,226,854	1,155,013	1,348,504	3,730,371

Peronospora on the Rhine—Commercial Agent Smith, of Mayence, writes as follows under date of March 7, 1887:

Another pest, as rapacious as the phylloxera, has made its appearance in the vineyards of Germany, threatening to accomplish on the Moselle and Rhine what the phylloxera has failed to effect. This is the peronospora, which did much damage last fall among the vineyards of the Moselle, and in a short time destroyed many bright prospects of a gratifying vintage. The experience of other lands has been that wherever the plague appears, in the succeeding year it ravages with increased violence, and the vine-dressers of the Moselle and Rhine are consequently filled with alarm for the future. It, too, is a raider across the border from France. The Chamber of Commerce at Coblenz has called the attention of the Government at Berlin to the pest, it is said, and asked if the simple remedy adopted on the banks of the Ohio in the United States to destroy the marauders, that is, the burning of the leaves upon which it has fixed its seat, cannot be ordered to be used by the police. This could not be tried last year, as the season was too far advanced when the scourge was discovered, but I suppose will be applied during the coming summer. The only effective application thus far known is the sprinkling of the under part of the infected leaves with a solution of 8 parts of sulphuric acid oxide of copper, 12 parts of lime, and 80 of water, but to this there is the great objection that the oxide of copper may have a bad effect upon the wine obtained from vines so treated. This, though, it is claimed, can be avoided by mixing 98 parts of water, 1 of sulphuric acid oxide of copper, and 1 of ammonia, together.

Russian Agricultural Exhibition.—Vice-Consul-General Prince, of St. Petersburg, writes as follows under date of March 19, 1887:

I am in receipt of a letter from the committee of the Agricultural Exhibition, which by permission of the minister of imperial domains is to be held this year at Kharkoff, from October 2 to October 22 (new style).

Foreign exhibiters are invited to supply two divisions of this exhibition, viz: Division I, cattle, horses, mules, asses, horned cattle, sheep, pigs, poultry, &c.; Division VI, agricultural machines and implements of every description.

Kharkoff being the center of the agricultural industry the exhibition is worthy of the notice of American manufacturers and exhibitors.

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REPORTS

FROM THE

CONSULS OF THE UNITED STATES.

No. 79.—JUNE, 1887.

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WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1887.

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DEPARTMENT OF STATE ★ UNITED STATES OF AMERICA.

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CONSULAR REPORTS

ON

COMMERCE, MANUFACTURES, ETC.

No. 79.—June, 1887.

THE NATIVE SHEEP OF SOUTH AMERICA.

REPORT OF CONSUL BAKER.

Is it not strange, in a country like the Argentine Republic, the mountain slopes and fastnesses of whose interior provinces and territories are the native homes of several species of wool-producing animals of the very first order, that these animals should be almost entirely neglected, and the attention of those engaged in pastoral pursuits directed exclusively to the production of sheep whose stock was originally brought from Europe? On account of the admirable fitness of the pampas of the province of Buenos Ayres, both in respect to climate and natural grasses, for the raising of sheep, it is not surprising that that industry has in the last thirty years developed into such grand proportions, now furnishing nearly one-third of the wool clip of the world. But in the upper, and especially the Andine provinces, and in Patagonia, where there is a scarcity of nutritious grasses, thus rendering those regions, in the absence of cultivated crops, less capable of sustaining that "latest production of art," the modern sheep, it has seemed to me an inexcusable want of enterprise on the part of the people not to rear and propagate, for the wool or hair, the great flocks of native breeds that roamed the wilds of those parts of South America long before the Spanish merino had found its way to this country, and whose fleeces were so wonderfully utilized by the Incas of Peru in the manufacture of textile fabrics.

HOW THE NATIVES UTILIZED THEM.

At the time that the Spaniards first visited South America there were no animals in the country which exactly corresponded to the sheep of Europe; but they found in Peru and in the regions of the Andes several species of animals to which they gave the name of "native sheep" (*carneros de la tierra*), but which the aborigines called the llama, the alpaca, the guanaco, and the vicuña. The two first-named varieties were even then nowhere to be seen in a wild state, but were domestic animals in the service of the natives, just as are our own modern sheep; and history gives no account of how the people came by them or where they originally came from. They used the llamas as beasts of burden, and they raised the alpacas especially for their fleeces, rarely using them for carrying-purposes. The other two varieties, the guanaco and the vicuña, were then, as they are still, always found in a wild state, and were seldom domesticated.

Prescott, in his Conquest of Peru, gives an interesting account of the uses which the ancient Peruvians made of these native sheep. He says:

> * * * But from the llama and the kindred species of Peruvian sheep they obtained a fleece adapted to the colder climate of the table-land, "more estimable," to quote the language of a well-informed writer, "than the fur of the Canadian beaver, the fleece of the *brebis des Calmouks*, or of the Syrian goat."
>
> Of the four varieties of the Peruvian sheep, the llama, the one most familiarly known, is the least valuable on account of its wool. It is chiefly employed as a beast of burden, for which, although it is somewhat larger than any of the other varieties, its diminutive size and strength would seem to disqualify it. It carries a load of a little more than a hundred pounds, and cannot travel over 3 or 4 leagues in a day. But all this is compensated by the little care and cost required for its management and its maintenance. It picks up an easy subsistence from the moss and stunted herbage that grow scantily along the withered sides and steeps of the Cordilleras. The structure of its stomach, like that of the camel, is such as to enable it to dispense with any supply of water for weeks, nay, months together. Its spongy hoof, armed with a claw or pointed talon, to enable it to take secure hold on the ice, never requires to be shod, and the load, laid upon its back, rests securely in its bed of wool, without the aid of girth or saddle.
>
> The llamas move in troops of five hundred or even a thousand, and thus, though each individual carries but little, the aggregate is considerable. The whole caravan travels on at its regular pace, passing the night in the open air, without suffering from the coldest temperature, and marching in perfect order and in obedience to the voice of the driver. It is only when overloaded that the spirited little animal refuses to stir; and neither blows nor caresses can induce him to rise from the ground. He is as sturdy in asserting his rights on this occasion as he is usually docile and unresisting. * * *
>
> Yet the ancient Peruvians seem to have valued the llama, in common with the other animals of that genus, chiefly for its fleece. Immense herds of these "large cattle," as they were called, and of the "smaller cattle," or alpacas, were held by the Government and placed under the direction of shepherds, who conducted them from one quarter of the country to another, according to the changes of the season. These migrations were regulated with all the precision with which the code of the *Mesta* determined the migrations of the vast merino flocks in Spain; and the Conquerors, when they landed in Peru, were amazed at finding a race of animals so similar to their own in properties and habits, and under the control of a system of legislation which might seem to have been imported from their native land. But the richest store of wool was obtained, not from the domesticated animals, but from the two other species, the guanacos and the vicuñas, which roamed in native freedom over the frozen ranges of the Cordilleras, where not unfrequently they might be seen scaling the snow-covered peaks, which no living thing inhabits save the condor, the huge bird of the Andes, whose broad pinions bear him up in the atmosphere to the height of more than 20,000 feet above the level of the sea. In these rugged pastures "the flock without a fold" finds sufficient subsistence in the *ychu*, a species of grass which is found scattered all along the great ridge of the Cordilleras from the equator to the southern limits of Patagonia. And as these limits define the territory traversed by the Peruvian sheep, which rarely, if ever, venture north of that line, it seems not improbable that this mysterious little plant is so important to their existence that the absence of it is the principal reason why they have not penetrated to the northern latitudes of Quito and New Granada.—(Vol. I, Book 1, Ch. V.)

THE SEVERAL CLASSES OF NATIVE SHEEP.

While there is a general similarity between these several classes, yet each one seems to form a distinct genus. They all, however, appear to be a species of animal between the sheep and the camel, since they have many points in common with both. At the same time the genus is as distinct as that of the horse and the ass; though, like those animals, they also can be crossed, which is also the case with the camel and the dromedary, the sheep and the goat, and the wolf and the dog—none of these different species directly indicating that they originally descended from the same type. The llama and the alpaca are of various colors, and sometimes speckled. The guanaco and the vicuña are generally of a single color—brown, approaching to red. The llama and the alpaca are so resigned to their state of domesticity that they are scarcely able to take care of themselves or live in a wild state.* The guanaco and the vicuña prefer the wild state, but they are very susceptible of being domesticated. The Jesuits, who established their missions in this part of South America very shortly after its discovery, were the first to tame and domesticate the two latter animals, and the first also who undertook to cross them, which they did for the peculiar wool which the cross produced.

NOT FOUND NORTH OF ECUADOR.

Although these animals are all indigenous to the Cordilleras of the Andes, none of them are found north of Ecuador, neither in Quito, Bogota, nor Caracas, where the climate is quite analogous to that of Peru or the Argentine Republic. The guanacos are especially found in the extreme southwestern portions of the province of Buenos Ayres and in the desert ranges of Patagonia as far south as the Straits of Magellan. There they are the principal food of the Indians, their skins being used for clothing and for coverings for their wigwams (*toldos*). The Chilians and the Auricanian Indians also have an animal, which they call the *chilihueque*, which is supposed to be the alpaca of Peru,

MOSS ENG.CO.N.Y.

LLAMA.

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* M. De Mousy, in his Description de la Confederation Argentina, Vol. 1, p. 15, says that the llama is still to be found in the wild state in the most desolate and inaccessible portions of the Andes of Bolivia.

modified by the climate, and which they formerly used as a beast of burden, but the use of which has in a great measure been superseded by the introduction of mules.

THE LLAMA.*

Of these several varieties of native sheep the largest and strongest is the llama (*Camelus llama*). It was especially esteemed by the native inhabitants as a beast of burden. Its load is about 100 pounds, though for short distances it is able to carry considerably more. Its height is from 4 to 5 feet, and the length of its body is about the same. It has a neck resembling somewhat that of the camel, and it carries its head in the same manner, thus making it look taller than it really is. It has no horns nor hump. Its hoofs are cloven, and it ruminates, or chews its cud. Its eyes are large and long, very black and prominent, but with a most soft and gentle expression. Its nostrils are wide and high. Its upper lip is divided like that of the camel, and it shows its teeth when it eats; its lower lip hangs slightly. In its upper jaw it has neither incisor nor canine teeth, but in the lower one it has six incisors and two canines; it has five molar teeth on each side of both jaws. When it walks it carries its ears forward like a horse that is frightened; when it is lying down they fall backward; its ears are sharp-pointed and about 4 inches long, and are fringed with white hair. Its neck is from 2 to 2½ feet long, slightly curved, and with a graceful movement very much like that of the swan. Its body is shaped quite like that of the deer, with clean, slender legs, its cloven hoofs ending in talons or claws like those of a bird of prey. Under its breast, over the sternum, there is a hard, callous substance about 6 inches long and 3 inches wide, on which it sleeps or rests. When it wishes to lie down it doubles its feet under its body and falls on this callous substance with a sensible noise, very much as the camel does, from which circumstance some argue that nature intended the animal for a beast of burden. Its tail is from 8 to 10 inches long and very woolly. The llama is covered with a very fine silky hair or wool, which is not shed, like that of the camel, but when properly cared for grows to a length of from 3 to 4 inches. The finest is on its legs. On the body the wool is of various colors, but under the belly it is always white. It neither has the dirt nor the grease which the fleece of a sheep possesses, and though it is not so esteemed as that of the alpaca, that portion which is taken from the loins fully rivals it in silkiness and softness. The animal rarely produces more than one young at a time, the period of gestation being six months, and it comes to maturity at three years of age. When it is angry it spits an acrid matter, and can thus project it to a considerable distance; but it does not bite.

The Indians are very fond of the meat, esteeming it beyond that of any other animal. They dry it in quantities, and they esteem the soup made from it as a sovereign remedy in nearly all cases of sickness. The step of the llama is solemn and majestic, and it is wonderfully sure-footed, seldom if ever making a false step in the mountain passes, even with the heaviest burdens. When a troop of them are thus loaded, they always go "single file," and they never incommode each other or dispute the way. It is a very sensible, docile animal, but it resists bad treatment. When its load is too great it will lie down and refuse to move, although it is castigated. At ordinary labor the animal will last for twelve years, but those which are used in the mines do not live longer than three or four years, in consequence of infirmity caused by the sulphurous and arsenious exhalations. In the past, in the far interior, these beasts of burden could be seen in troops of five hundred, but it is now a rarity to see a hundred together. They exhibit great affection for the person who takes care of them, and after an absence will bleat and make wonderful demonstrations of joy at seeing him.

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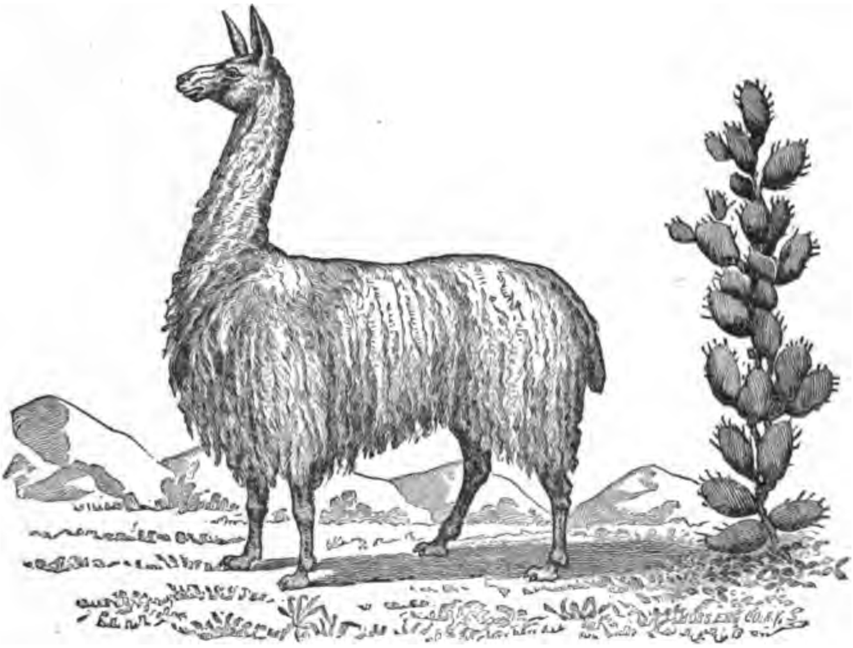
* In the Palermo Park of Buenos Ayres there are a number of paddocks filled with
ese different animals, and these descriptions are mostly taken from a personal in-
ction of them.

THE ALPACA.

The size of the alpaca (*Camelus alpaca*) is a little less than that of the llama, its height being about 4 feet, the length of its body being the same. Its neck is neither so long nor so delicate, nor does it possess the noble presence of the llama, though it is not an uninteresting animal. The appearance of its body when the fleece has been removed is very similar to that of the llama. Like it, the upper lip is divided, and it shows its teeth when it eats, as also its gums, which are as black as ebony. Its head looks more like that of the sheep, except that it always keeps its ears pointed forward. Its nose, however, is black, like that of the llama, but it is not so long nor so sharp-pointed, nor are its nostrils so dilated nor so high up. Its hind legs are shorter than its fore ones and are somewhat curved. Its hoofs are cloven, but the claws are very small. It also has a callous spot on its breast, but it is small. Its tail is very bushy. It is a ruminating animal, but it does not possess the habit of spitting when it is enraged. It has large, expressive black eyes, and its disposition is very gentle and friendly, but it makes no outward demonstrations of joy. It drinks very little, but has a voracious appetite. When used as a beast of burden it is capable of carrying from seventy-five to a hundred pounds, but not on long journeys. It is on account of its fleece that the alpaca is most

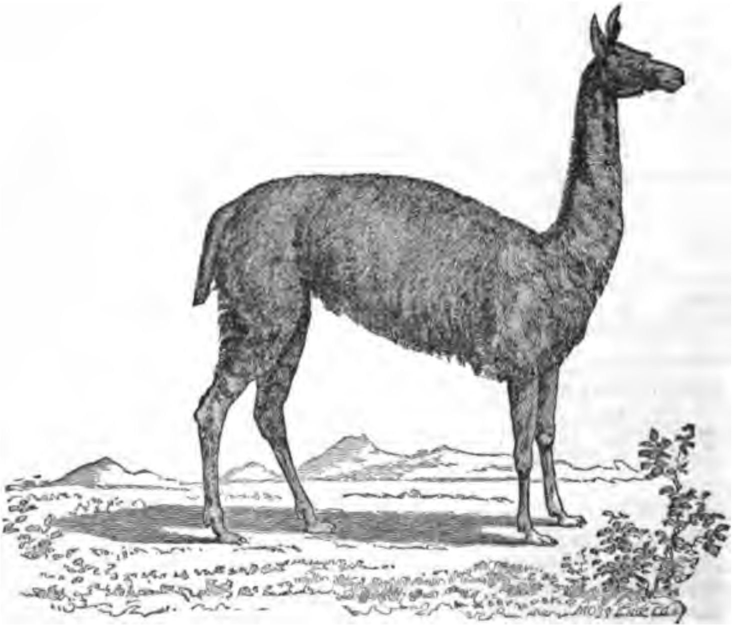


ALPACA.

esteemed, and this makes it the most valuable of the South American native sheep. The wool is long, soft, and abundant, being double the amount which the other varieties afford. On its sides, breast, and back its fleece is from 8 to 16 inches long. It is of various colors and sometimes speckled. Outside of the wool, and somewhat protecting it, is a long hair, which is exceedingly fine, so that the fleece is really a combination of hair and wool. It is sheared by the Indians twice a year—in June and December.

THE GUANACO.

The guanaco (*Camelus huanacus*) is 3½ to 4 feet in length by about 4½ feet in height. Except in a few rare cases, it is always found in the wild state. When young it is, however, very easily tamed; when old it is impossible. It is always of the same color, a brownish red. In its general appearance it resembles the llama, the most notable differences being a greater curvature of the back, a more shaggy fleece, and smaller feet. Its head is more oval and not so large. It also lacks the callous spot on its breast, and its nostrils are small. Its upper lip is split and it has the teeth of the llama, and, like it, it has the habit of spitting. Its disposition and habits, however, are very different, and show that the guanaco is of a different race. There is no European animal which so much resembles it as the grayhound, and, like it, its legs always seem to be too long for its body. The guanaco is the fleetest animal which South America produces, and it is so courageous that when surrounded by the hunters it will turn upon them and trample



GUANACO.

them underfoot in its efforts to escape. It is gregarious, and it is generally seen in droves or flocks of from two to three hundred. They are vigilant and exceedingly circumspect in their movements, and when feeding place one of their number as a sentinel to announce the arrival of an enemy. The flocks which are now to be seen on the frontiers have generally a very large excess of males, for the reason that being stronger and swifter of foot than the females, and perhaps lacking that curiosity which induces the latter to approach too near to a point of danger, they more readily escape the toils of the hunters.

Darwin, in his Voyage of a Naturalist Around the World (p. 166), gives the following very interesting account of the guanaco and its habits, viz:

> The guanaco, or wild llama, is the characteristic quadruped of the plains of Patagonia. It is the South American representative of the camel of the East. It is an elegant animal in a state of nature, with a long, sleek neck and fine legs. It is very common over the whole of the temperate parts of the continent as far south as the islands near Cape Horn. It generally lives in small herds of from a half a dozen to thirty in each, but on the banks of the Santa Cruz we saw one herd which must have contained five hundred at least.
>
> They are generally wild and extremely wary. Mr. Stokes told me that one day he saw through a glass a herd of these animals which evidently had been frightened and were running away at full speed, although their distance was so great that he could not distinguish them with the naked eye. The sportsman frequently receives the first notice of their presence by hearing from a long distance their peculiar shrill, neighing note of alarm. If he then looks attentively he will probably see the herd standing in a line on the side of some distant hill. On approaching nearer a few more squeals are given, and off they set at an apparently slow but really quick canter along some narrow beaten track to a neighboring hill. If, however, by chance he meets a single animal or several together they will generally stand motionless and intently gaze at him, then perhaps move on a few yards, turn around, and gaze again. What is the cause of this difference in their shyness? Do they mistake a man in the distance for their chief enemy, the puma, or does curiosity overcome their timidity? That they are curious is certain, for if a person lies on the ground and plays strange antics, such as throwing his feet up in the air, they will almost always approach by degrees to reconnoiter him. It was an artifice that was frequently practiced by our sportsmen with success, and it had moreover the advantage of allowing several shots to be fired, which were all taken as parts of the performance.
>
> On the mountains of Tierra del Fuego I have more than once seen a guanaco, on being approached, not only neigh and squeal, but prance and leap about in the most ridiculous manner, apparently in defiance of a challenge. These animals are very easily domesticated; and I have seen some thus kept near a house in Patagonia, though under no restraint whatever. They are in this state very bold and readily attack a man by striking him from behind with both knees. It is asserted that the motive for these attacks is jealousy on account of their females. The wild guanacos, however, have no idea of defense; even a single dog will secure one of these large animals until the huntsman comes up. In many of their habits they are like sheep in a flock. Thus when they see men approaching in several directions on horseback they soon become bewildered and know not which way to run. This greatly facilitates the Indian way of hunting, for they are thus easily driven to a central point and are encompassed.
>
> The guanacos readily take to the water; several times at Port Valdes they were seen swimming from island to island. Byron, in his Voyage, says he saw them drinking salt water. Some of our officers likewise saw a herd apparently drinking the briny fluid from a salina near Cape Blanco. I imagine in several parts of the country if they do not drink salt water they drink none at all. In the middle of the day they frequently roll in the dust in saucer-shaped hollows. The males fight together. Two one day passed quite close to me, squealing and trying to bite each other, and several were shot with their hides deeply scored. Herds sometimes appear to set out on exploring parties. At Bahia Blanca, where within 30 miles of the coast these animals are exceedingly infrequent, I one day saw the tracks of thirty or forty, which had come in a direct line to a muddy salt-water creek. They then must have perceived that they were approaching the sea, for they had wheeled with the regularity of cavalry, and had returned back in as straight a line as they had advanced.

THE VICUÑA.

The vicuña (*Camelus vicuña*, Linné) is the smallest and most delicately formed of any of the native sheep, but its wool is the finest, and on that account it is the most interesting and highly prized. Its height is only about 3½ feet and 2½ in length, and its body is much lighter. It only weighs from 75 to 100 pounds, while the llama weighs 250. In its general form and appearance, however, it corresponds to the other varieties. Its head seems large for the size of its body and is more oval, but it runs almost to a point, its snout being quite sharp, thus making its upper lip, which is divided, and its mouth very small. Its head, however, is erect, and is covered with wool of a reddish color, which is also the color of the fleece. Its nostrils and teeth are also small, and its upper gums are black. Its ears are sharp-pointed and stand erect, and its neck, where it joins the body, forms quite a depression. It has no callous spot on its breast. Its legs are delicate and seem very long, compared with the size of its body. Its feet are small. Its wool is the finest, the softest, and the most silky that is known, and when it has been cleared of the hair which grows with it, it is regarded as the most valuable in the world. The wool on the back is without any mixture of hair, while on the rest of the body it is even longer than the wool, thus somewhat protecting it. The wool on the belly is white.

VICUNA.

The vicuña does not possess the gracefulness of the other classes of native sheep. It lacks the majestic appearance of the llama, the soft and expressive look of the alpaca, or the independent and lively carriage of the guanaco. Its eyes are black, but without expression, rather round than oblong, and as the pupil occupies all the iris, it gives it a vacant look. It ruminates, but drinks very little water. It is gregarious and inhabits the snowy peaks of the Andes, and the flocks are frequently mixed with those of the guanaco. They are very timid and difficult to secure. It is calculated, however, that 250,000 vicuñas are still annually hunted down.

THE WOOLS OF THE NATIVE SHEEP.

In the relative value of the wools of these four varieties of native sheep there is a very great difference. Mr. John Harratt, deceased, late of this province, an Irishman, for many years a sheep-farmer on a large scale, and who made a scientific study of the best ways and means of refining the wools of the Argentine Republic, took likewise an enthusiastic interest in the native varieties of sheep, which he also raised on his *estancia*. From a paper which he prepared on the subject of these wools I give the following as his estimate of them:

WOOL OF THE LLAMA.

It is what is called ordinary, long, mixed with hair, very flaccid, and lacking elasticity; generally hazel-colored, but the belly-wool is always white. It lacks the oil and dirt of that of the ordinary sheep. It is not exported from the country, but it is manufactured by means of hand looms in the interior into blankets and coarse woolens.

WOOL OF THE ALPACA.

This wool, which is generally black, is very long, sometimes growing to the length of 12 inches and more. It is somewhat wavy, but of the class which in this market is called smooth (*lisa*). It does not possess the property of felting or of being fulled, except in a very imperfect manner. It is very elastic, but takes color with difficulty, and only after being very thoroughly scoured. It is soft, silky, and lustrous, which characteristics it does not lose upon being colored. It is liable to break under the comb, but this probably arises from its extreme length and the fineness of the fiber. There are still considerable quantities of this wool sent to Europe, but the greater part of the annual yield is manufactured here in the country, the wool being in great repute for making blankets, rugs, carpets, and various species of cloth.

WOOL OF THE GUANACO.

This is at present only obtained from the skins of the wild animals after being trapped and killed. It is of the same nature and color as that of the vicuña; but with this difference, that it is shorter, coarser, and of a color which is not so strong. Besides, it is so mixed with hair as to lose considerable of its value. It is also so dirty and so full of scurf as to make it sometimes quite unmerchantable; but this perhaps is not the result of any infirmity in the animal, but on account of its having been taken at an improper time for the wool. But when thoroughly scoured the wool is very fine and soft, and is greatly employed in the manufacture of hats. A thick muslin is also manufactured from it, quite impervious to water, which is used for umbrellas. Considerable quantities are exported to Europe, where it is greatly esteemed. It would be greatly improved if the wool were separated according to its qualities and assorted as is done with that of the vicuña.

WOOL OF THE VICUÑA.

It is of a very fast color and exceedingly appreciated on account of its fineness and the silkiness of its touch. Indeed it gives a fleece more valuable than that of any other animal in the world—"more estimable," as has been truly said, "than the fur of the Canadian beaver, the fleece of the *brebis des Calmouks*, or of the Syrian goat." The wool is finer than that of Cachemire or of the goat of Bucharia. Perhaps its only defect is the color; and even yet the secret of giving it any other color than black has not been discovered in Europe, although the Indians of Peru managed to give it most brilliant colors. One inconvenience in regard to this wool is that it is more or less mixed with hair, but this could be readily obviated if the animal was properly domesticated and refined. It has the property of being felted and fulled in a very remarkable degree. If this wool could be produced *white* it would be almost invaluable. The diameter of the fiber is as follows: On the back, 7 to 8 degrees; on the neck, 5 to 6 degrees; on the legs, 8 degrees, eirometer of Dolland. Wool of the neck $\frac{6}{10,000}$ to $\frac{8}{10,000}$ of an inch; of the back, $\frac{7}{10,000}$ to $\frac{8}{10,000}$ of an inch; of the leg, $\frac{8}{10,000}$ of an inch; the red hair on the back $\frac{35}{10,000}$, and the white hair of the belly, $\frac{28}{10,000}$ to $\frac{30}{10,000}$ of an inch.

NATIVE MANUFACTURES OF THESE WOOLS.

Not a great quantity of the wool of any of these animals is shipped from the country; the exact amount, however, cannot be known for the reason that the exports of wool are not classified by the authorities. The greater portion is consumed in the country. It is used by the inhabitants of the interior in the manufacture of yarns, threads, and a variety of woolen textiles. They display a wonderful skill, without the usual appliances of the art, in the making of shawls, ponchos, rugs, &c.

Some of these fabrics are a marvel to all who examine them. By separating the filaments of different tints of the vicuña wool, and making threads of them with the spindle, they are enabled, by means of a common hand-loom, to weave a cloth which, aside from the striking arrangement of its colors, is far superior in closeness of texture to the best woolens of commerce. The best of these native fabrics are made in Catamarca and some of the other upper provinces, but not in quantities to meet the demand. The principal merit of these native ponchos, shawls, &c., is that they are entirely impervious to water, at the same time that they are light and fine; and they readily command exorbitant prices, ranging from one to five hundred dollars, gold, according to their finish, thus quite rivaling the camel's-hair shawls. To make them, however, is the work of many months of exacting, hard labor. As the hunting of the vicuñas is somewhat difficult, and they are becoming somewhat scarce on account of the recklessness with which they are slaughtered, the price must soon go even beyond these figures.

DOMESTICATION AND REFINEMENT OF NATIVE SHEEP.

In regard to the domestication of these animals and the refining and improving of their fleeces by a proper system of breeding, there seems to be no question. So far as the llama and the alpaca are concerned, the ease with which they are domesticated is historical. When the Spanish invaders conquered the country they found both of these animals in the service of the natives, either employed as beasts of burden or carefully attended under the direction of shepherds for the fleeces which they furnished. They are still to be seen domesticated in flocks through Peru, Bolivia, and some of the Andine provinces of the Argentine Republic, cared for and folded just as the European variety is here. It is true, however, that they have been greatly superseded as beasts of burden by the mule, and as wool-producing animals by the modern sheep. No particular pains have ever been taken to domesticate the guanaco and the vicuña; but the efforts of the early Jesuits in this line prove the easy success with which it can be done. The ancient Peruvians do not seem to have tamed them, but, although they roamed in a wild state, it was not permitted to kill them, except under certain conditions, but in the proper season the great flocks which were found in the mountain passes were surrounded, carefully captured, sheared, and then allowed to go free again.

Prescott, in a very graphic manner, informs us how these great hunting expeditions were managed. In his Conquest of Peru, Vol. I, page 147, he says:

> Although roaming without a master over the boundless wastes of the Cordilleras, the Peruvian peasant was never allowed to hunt these wild animals, which were protected by laws as severe as were the sleek herds that grazed on the more cultivated slopes of the plateau. The wild game of the forest and the mountain was as much the property of the Government as if it had been inclosed in a park or penned within a fold. It was only on stated occasions, at the great hunts, which took place once a year, under the personal superintendence of the Inca, or his principal officers, that the game was allowed to be taken. These hunts were not repeated in the same quarter of the country oftener than once in four years. At the appointed time all those living in the district and its neighborhood to the number, it might be, of fifty or sixty thousand men, were distributed around, so as to form a cordon of immense extent, that should embrace the whole country which was to be hunted over. The men were armed with long poles and spears with which they beat up the game of every description lurking in the woods, the valleys, and the mountains, killing the beasts of prey without mercy and driving the guanacos and vacuñas towards the center of the wide-extended circle, where they found no place for shelter or escape. * * * Nearly the whole of the sheep, amounting usually to 30,000 or 40,000, or even a larger number, after being carefully caught and sheared, were suffered to escape and regain

their solitary haunts among the mountains. The wool thus collected was deposited in the royal magazines, whence in due time it was dealt out to the people. The coarser quality was worked up into garments for their own use, and the finer for the Inca; for none but an Inca noble could wear the fine fabric of the vicuña.

On the subject of domesticating these native sheep I translate the following from what Mr. Harratt has written:

> Experience has taught us that every wild animal, provided he is not very savage or provided by nature with facilities for his own protection, can be tamed and even domesticated. We have in the vicuña and other varieties of the South American sheep an illustration of this fact. When any of these animals are taken very young they can be tamed without the least difficulty. Up to the present time no attempts have been made to form very large flocks of them, at least not since the Jesuits were expelled from the country. I know, however, that a sheep farmer in Quillota, in the Republic of Chili, for an experiment, tamed twenty guanacos, which would every morning go out to graze and return at night unattended. Once tamed, the animals in their successive generations continued in the same domestic state. The Jesuits at the time of their expulsion had six hundred tame vicuñas, and had they remained in the country the domestication of these animals would have been an assured fact.
>
> The annual shearing of the vicuña, without any other attention, would cause a great improvement in the wool, making the fleece much more regular and even, and thus it would lose much of the hair which grows with it, the value of the fleece being greatly enhanced thereby. The wool of the alpaca, now so little cared for, also admits of great improvement and is deserving of attention. Since time immemorial the Indian has preferred a black color and to have his clothing black, but it is equally as easy to raise white alpacas as white sheep, and in the same manner and by a similar treatment it is equally easy to cause the hair to entirely disappear from the fleece, which would increase the value of the wool threefold. Spain set the example of crossing the breeds of sheep in order to improve the quality of the wool over two thousand years ago, and Columela has immortalized his name by what he has done in this respect by establishing a breed of sheep which has extended over the entire world. The Spaniards, however, seem to have lost their enterprise, and have allowed other nations to surpass them; at least they have left for other nations and future times the improvement which can be made in the quality of wool by the crossing of sheep with the vicuña.
>
> Art and the experiments of man have made great modifications in the productions of nature; and in no department of science have there been greater advances made than in that of the crossing of different classes of animals, by which the hybrid becomes more valuable than the original stock. We know by experiment that the fleece of the alpaca crossed with the male of the guanaco, or that of the llama crossed in the same way, is a great improvement on the original alpaca or llama. We also know that by crossing a white llama with a red guanaco the foal becomes white. The native sheep do not belong to the same genus that the camel does, although many persons think so; or, at least, they partake equally of the properties of the sheep. The vicuña is not larger than some merino sheep, produces wool, is timid and inoffensive; has the same bleat, and in the same manner strikes the ground with its foot when it is enraged. Why is not the alpaca equally susceptible of improvement? Although it is not possible, without further experiments, to know the full effect of crossing the alpaca with the modern sheep, it is not to be doubted, from what we already know, that a breed could be produced which would exhibit a great improvement in the qualities of the fleece. We all know what Bakewell has done in this respect, by selecting the most perfect individuals of the same family for breeding purposes, and it seems almost certain that every class of animals, domestic or wild, is susceptible of improvement. Thus, the hair can be made to disappear from the fleece of the vicuña by selecting animals for propagation which have but little hair upon their bodies. And as the rule is general that the offspring partake of the peculiarities and characteristics of their parents, the quantity of the hair would go on decreasing in successive generations, until it disappeared altogether. And in all probability it would be equally easy to produce white wool from the vicuña, for that animal is not unfrequently of that color.

GENERAL INDIFFERENCE ON THE SUBJECT.

While these are the views of a gentleman who devoted the best years of his life to the advancement of the sheep industry of the River Plate, and believed that, by crossing and breeding in, there were grand possibilities for the refinement of the wools of the native sheep, yet in late years, especially, so far as I am aware, scarcely anything has been attempted in the latter direction. Here, in the provinces of Buenos Ayres, the only sheep which occupy its great natural pastures are the European varieties. Except in the *quintas* of wealthy proprietors or in the paddocks of the public parks, but little is now seen of the native sheep which once had the exclusive range of the vast pampas of this part of South America. In the wilds of Patagonia and in the fastnesses of the Andes what remain of these remarkable animals are now almost exclusively to be found. In the upper provinces and in Peru and Bolivia they are occasionally to be met with in a domestic state, and sometimes, especially the llama and the alpaca, in considerable numbers; but no efforts are made to improve their condition or the quality of their wools. The business requires more patience and a greater amount of scientific labor than the rude natives and half-breeds of the far interior are qualified to bestow upon it. As were their fathers before them, they are content with the mere raising of these native sheep. The wool mixed with hair which they obtain from their shearings is amply sufficient to meet the wants and conditions of their primitive mode of life, and they are too indolent to make experiments about a matter in regard to which they are utterly indifferent. And so, unless a new and more investigating race of men come in to take advantage of the situation, nothing will ever be done here in the country for the refinement of these native breeds of sheep.

ACCLIMATIZATION OF THE ANIMALS ELSEWHERE.

Whether these animals would bear a transfer to other countries, where they might be better appreciated, is a question which does not appear to be fully settled. I believe, however, that through the efforts of naturalists they are now to be found in some of the parks and zoological gardens of the large cities of Europe and the United States, though in those places they are only kept for show. This, however, would seem to prove that they can be acclimatized. In examining the files of an old paper a short time ago, I saw a notice that a Mr. A. J. Duffield, an Englishman, had greatly interested himself in the native sheep of this part of South America, and was then undertaking the experiment of transporting a flock of alpacas to Australia. A letter of his on the subject, written from Potosi nearly twenty years ago, gives a great amount of information as to these animals, and is as accurate in description and detail as though it were just written. It is so full of interest that I made a copy of it, and give it below:

MR. DUFFIELD'S LABORS.

POTOSI, *November* 25, 1862.

MY DEAR SIR: I wrote you in July last from the desert of Atacama, the dangers and miseries of which, to one who has hardly seen the bush, much less lived in it, were almost insupportable. I was, however, saved from the danger of leaving my bones to whiten in its burning sand by a little pluck on my part and great intelligence and endurance on the part of my mule—an animal the value of which is hardly known in our part of Europe and which for purposes of exploration in Australia would be invaluable. You will hardly credit it, but my mule was nearly three days and two nights without taking water and twenty-four hours without food; and she carried me for those forty hours at an average rate of 6 miles an hour.

Notwithstanding the intense heat of Atacama, I met llamas everywhere, and was gratified at seeing, for the first time, a flock of some two or three hundred vicuñas on the banks of the white lakes of Ascotan. The height above the level of the sea of these charming lakes is not less than 8,000 feet, but the heat is as great by day as I ever felt it on a hot-wind day in Melbourne in February. The nights, however, are bitter cold, and the lakes are frozen over in a few hours sufficiently hard to walk over them.

For another hundred miles and before crossing the Cordilleras I met with these animals and their congeners, the llama and alpaca, at various elevations, and was much pleased on visiting a swampy hacienda or estate, belonging to a community of nuns, in making the acquaintance of the largest flock of alpacas that I had ever seen.

They had, however, been allowed a promiscuous intercourse with the llamas, and it was easy to see at a glance how much of grace and symmetry the animal had lost by the connection, to say nothing of the great damage done to the quality of the wool. From what I remember of this family in the royal park of Melbourne, I have very serious doubts whether you have any pure alpacas in Victoria, or if one or two males, they are of very inferior breed.

What has pleased me and rewarded me most for the horrible journeys I have passed is in being able to verify by personal observation the important fact that the alpaca will live and thrive in the hottest and coldest climates, enduring all rigors and trials of the most rapid change from one extreme to the other, provided the climate be dry. Here, from the coast to the peak of the Silver Cerro of this once silver city, a height of more than 16,000 feet, the air is so dry and so charged with electricity that your hair goes off in small shocks when you comb it. Even in the rainy season, which continues four or five months, this quality of the atmosphere continues, so much so that on the snowy heights of Cura Guara or the slopes of the highest range of the Andes the cold is not so penetrating or trying as it is in London in the month of November. Although the city of Potosi is at an elevation of some 14,000 feet above the level of the sea, you never see a fire or a stove in any house in the coldest season; and though you experience all the four European seasons of spring, summer, autumn, and winter in one day and every day of the year in this extraordinary city, the rapidity and violence of these changes produce no ill effects on the health of man or the inferior animals. In spite of the peculiar dryness of the atmosphere, which now appears necessary to the cultivation of alpacas, there was a time when the Peruvians were amongst the first agriculturists of their age, when the alpaca browsed in the moist and filthy atmosphere of the Peruvian coast; and if this intelligent and valuable animal could live and thrive there, there is no part of Australia or New Zealand where it would not equally live and thrive.

If you could only see the hot sandy desert where I met with these animals, or the bleak, barren, and horribly desolate mountains which they climb in search of a very precarious living for eight months in the year, you would wonder how these creatures live. Here and there they will find a few dry ferns, growing between barren rocks, or sheltered from the scorching heat between large stones. The ice plant and its relations, with a few other green things, that only just peep out of the earth, and which no sheep could nibble, form the chief food—together with any hardy shrub which the Indian has not cut down for fire-wood—for the alpaca. In short they will live where a sheep would die, and one of the great benefits which this animal will confer upon Australia will be to make as valuable in the fullness of time its waste, unconquered, and almost impenetrable lands as its glorious, broad agricultural plains.

The flesh of the alpaca and llama requires to be known before any one who has not tasted it can believe in its flavor. One of my friends, at whose house I spent a few days in the desert, was greatly concerned on finding on the day of my arrival that the only joint for dinner was the choice cut of a llama. He said nothing until dinner was over and then "hoped I had dined well." The truth is I had been served twice to this Indian fare without knowing whether I was eating fine mutton or luscious veal, for it had a dash of both. I ate llama all the time I was there, and everywhere I go I call for llama. It makes very good *charqui* (jerked beef), and the *caldo* or soup made from it is very fine. One thing is certain, I hope, that the world is not going to end its days on beef and mutton, and the sooner it can add a roast of llama or alpaca to its Christmas fare the better for us and it. * * *

I think I can now safely inform you that our expedition will set sail for Melbourne in March next. We have been retarded by the rains, and we must march through floods of water, otherwise we should get no food by the way for our flocks. We have secured a good number of pure whites and of the most valuable breed. This will become, if we have a prosperous voyage, the most valuable stock of which Victoria may boast. Our expenses and difficulties have been great, and it is yet uncertain if we shall ever be reimbursed or not; but I have no reason to despair or even complain. My friend, Mr. G. H. Williams, on whom the labor and responsibility of our enterprise have mainly rested, and to whom Australia will be indebted for pure alpacas, when they arrive there, has so far conducted it so admirably that I have no fear of the result.

WHAT WAS THE RESULT?

What was the "result"? What ever became of Mr. Duffield's enterprise to introduce pure alpacas into Australia, I am unable to say. I have an undefined impression that years ago I heard that his vessel was wrecked on the passage out from Callao, but of this I will not be positive. The enterprise, however, was of such high importance to the world generally that its sequel were worth finding out. If the animals arrived in Melbourne—as the rearing of sheep has since fully monopolized the pastoral attention of the people of that country—it would seem that they after all did not answer the purposes or meet the success which was anticipated. But this, even if true, is not of itself sufficient to convince us that the acclimatization of these animals in other countries is impossible. The facts set forth in Mr. Duffield's letter, as to the hardiness of the alpaca and other varieties of the South American sheep, are all that is needed to show that, under proper conditions, they can be reared elsewhere. Provided the climate is dry, no extremes of heat and cold, no sudden fluctuations of temperature, no coarseness or even scarcity of food, seem to affect these valuable animals.

COULD THE ANIMALS BE DOMICILED IN THE UNITED STATES?

I merely make the suggestion, that in these respects, if we had ransacked our inventiveness to describe an animal which should be preeminently adapted to some portions of our own country we could hardly have imagined a breed more suited than these South American sheep. I refer particularly to the desert portions of Texas, and of New Mexico and Arizona, whose arid soil and general scarcity of water are a great drawback to their proper development. Introduced under favorable circumstances, any or all these classes of animals might be able to fill an industrial gap in those regions which otherwise we can scarcely expect to find a filling for; and thus even the most unpromising portions of those Territories might in time attain to a development, through the valuable wools which these animals afford, that there else can be but little hope for, while in other parts of the country, wherever ordinary sheep may be produced, the introduction and acclimatization of these valuable wool-producing animals would give us a new source of national wealth.

GRADUAL EXTERMINATION OF THESE SHEEP.

Meanwhile, however, throughout the Argentine Republic, in the absence of any laws regulating the capture and killing of these native sheep, especially the guanacos and vicuñas, their numbers are rapidly becoming less and less; and at the rate at which they are at present annually hunted down, unless laws for their protection shall be enacted, it will not be many years before, like our own buffalo, they will in this part of South America become quite exterminated.

I translate the following from Señor Nap's Republica Argentina, page 304:

> The attention given to the raising of llamas in this country is insignificant, although the mountain regions of our northern provinces form a part of their *habitat*. Only the province of Jujuy counts among its cattle 16,000 llamas, whose value is $40,000 gold. Some intelligent *estancieros* of the littoral provinces—above all in Buenos Ayres—have latterly made some excellent attempts in their establishments to raise llamas as well as alpacas. It is to be deplored yet, even more than the neglect shown to these two animals, that the vicuña, whose wool is so fine and valuable, is hunted as a wild beast, instead of endeavoring to breed it into domesticity. Its near extermination is almost a mathematical certainty. Where it as yet exists in considerable flocks, for instance in the province of Catamarca, at certain seasons of the year, *i. e.*, when these animals have most wool, a battue is organized, and followed by a butchery which cannot be sufficiently condemned. The animals are killed by hundreds only to despoil them of their wool. Fortunately the authorities have at length become sensible of the injury which this senseless proceeding causes the nation, and laws have been promulgated in some parts of the Republic to protect the vicuña.

We ought, therefore, to expect that before long the act of killing a vicuña will be punished with all possible severity. It is sufficient to shear the animals when caught and thereafter place them at liberty, if it be not desirable to tame and breed them; but their butchery is an act of brutality which ought to be severely punished.

In Patagonia not merely the Indians but now also the settlers on the far frontiers are making sad havoc among them, if we may judge from the quantities of skins, rugs, and furs manufactured of strips of the guanaco pelts in colors called *quillangos*, which are sent to this point for a market. In the northwestern portions of the Argentine Republic this wholesale slaughter is not indulged in; the animals are too essential in the domestic economy of each family for any reckless destruction of them, while in Peru and Bolivia I believe there are laws for their protection. The llama and alpaca especially, being thoroughly domesticated, have the privileges and rights of household animals.

As I said at the beginning of this report, considering the marvelous excellence of the wools which these animals produce, the exquisite flavor of the meat they afford, the ease with which they can be domesticated, and the possibilities they offer for still greater refinement of their fleeces, it is strange that nothing whatever is done for their proper propagation and production.

E. L. BAKER,
Consul.

UNITED STATES CONSULATE,
Buenos Ayres, March 21, 1887.

GRASSES OF THE ARGENTINE PAMPAS.

REPORT OF CONSUL BAKER.

The wealth of the Argentine Republic consists in great part of its pastoral industry. There are in the country, according to the latest official estimate, 14,171,000 cows, 4,186,000 horses, and 70,910,000 sheep, whose total value is put at $331,000,000, and yet it will surprise the cattlemen of the United States to learn that this immense number of animals, year in and year out, are never fed a mouthful of food, but feed themselves, and live, as best they may, entirely on the natural grasses which grow spontaneously. During the frosts of winter and the droughts of summer it is the same. The *estanciero* makes no provision for either, and his animals, running ever at large over his broad leagues of land, must accept the pasturage, whether it be better or worse, which they afford. It is an exceptional year, however, when his animals cannot, after some sort, "pull through" from one season to another.

EXTENT OF THE PASTURAGE.

What this pasturage signifies will be better understood when it is known that these natural grasses cover over 63,120 square leagues, against 645 square leagues devoted to crops and agriculture. That is to say, the area of the latter is yet less than 1 per cent. of the whole. It were worth a gallop over the pampa, to the lover of nature, to see the kinds and varieties of native grasses which can thus furnish food the year around to such immense numbers of animals, and which are the sole and only dependence of the *estanciero*.

Cattle are never stall-fed in this country. On this subject I find the following paragraph in the Buenos Ayres Herald of the 26th:

> One of the necessities of the times is the fattening of cattle for meat. We have no beef worthy the name, while we have cattle so many that we cannot sell them. We hear of a lot of bullocks numbering a thousand which cannot be sold at $11.50 per head, and yet we have dear beef and poor meat in this city. The cattle which reach us are unfit for food, but are good candidates for feeding, and if those who have lands near the city would go into the business of stall-feeding cattle for the market it would prove a good business, and our reasons for so saying are that the price of good beef is greater here than in the United States, where the price of land and of food is greater than here, and yet where they find it a good business to fatten cattle. It is time that we had done with calling skin and bones beef.
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> Cattle are now quoted for little more than the value of the hides, $6 per head being a common price for native cattle.

Indeed there cannot be anything more exhilarating than to career on the back of a fine horse across these plains of Buenos Ayres on a bright clear morning, or in the cool of a summer afternoon, a cloudless sky of deep azure, an atmosphere marvelously light and pure, and a soft breeze communicating a sense of indescribable buoyancy, the vast plains, boundless as an ocean, inspiring an irresistible feeling of joyous freedom as it fades away in the distance. I may premise that the geological formation of these great pasture lands of the Argentine Republic, known to scientists as the Pampean, consists of a yellow calciferous clay, more or less mixed with sand and saline substances and capped with a rich alluvial deposit. The soil is entirely destitute of indigenous woody plants. I do not know of a single tree or bush that belongs to the pampa. Without natural trees, without ligneous plants, its chief characteristic is the predominance of the *Gramineæ*. On this account the flora is monotonous and uninteresting to botanists; but it is this very predominance of the social plants which makes these vast plains so valuable to the cattle-grazer. It is grass, grass, grass, everywhere! Even the poorest parts are not without some vegetation capable of furnishing pasturage. It is this fact, coupled with the mild climate—mild even in winter—which makes it possible to stock these natural pastures so heavily.

HARD AND SOFT GRASSES.

This perennial pasturage consists of two distinct classes of grasses. One of them has received the general name of "hard grasses" (*pasto duro*), and the other that of "soft grasses" (*pasto blando*). The first kind produces up to the period of its flowering an excellent nourishment for animals—better on account of its length and hardness for cattle and horses than for sheep. It dries after flowering, and then its leaves become as hard as straw and lose the greater part of their nutritive qualities. Nevertheless animals can still subsist on it in this state for several months, and in an emergency it will ordinarily carry them through the winter. The soft grass is composed principally of *Gramineæ*, more or less tender and savory, and which the natives of the country know under the name of *gramillas;* but it also includes some herbaceous and juicy plants. Of the latter I may mention two species of *trebol*, the ordinary and the sweet-scented clover; also a species of *Erodium*, called here *alfilerillo*, found especially in arenaceous soil; also the spotted thistle (*Cardo asnal*), whose tender leaves are appetizing for both sheep and cattle. Until the formation of the seed these annual plants constitute an excellent nourishment, especially for sheep. The spotted thistle has a broad, bright green leaf, and grows to the height of 8 or

10 feet in such dense array as to be impenetrable except in the cattle track. These beds of thistle sometimes extend leagues and leagues, and at the time of flowering, as far as the eye can reach, present an almost unbroken sea of rose-purple flowers. In some districts a day's ride along a road or track on either side of which stretches this forest of thistles, leaves the traveler still with the same forest stretching to the horizon. Thousands of cattle browse on these thistles, working tracks in various directions through them, feeding on them and the grasses which grow between. About midsummer they seed, wither, and die, a heavy rain and a stiff breeze quickly knocking down the stalks, while the softer stems soon break up under the action of the sun, the cattle and sheep growing fat as they feed on the oily seed and withering leaves. Other grasses, distinct in variety, then spring up and cover the ground, obliterating almost every trace of the fallen thistles. But in the autumn and winter the thistle seed again germinates, and the tender plants furnish a winter food for the cattle and sheep. But if the rains should happen to fail and a drought ensues (a misfortune which not unfrequently occurs), the soil becomes completely bare, and then the animals are reduced to eating such dry remains of these various grasses and annual plants as they can find. There are broad districts, particularly in the southern portions of the province of Buenos Ayres, which every summer are so entirely stripped of vegetation that the animals die of starvation, unless they are transferred to other points where the pampa has had the benefit of summer rains.

MIXTURE OF THE DIFFERENT CLASSES.

In the virgin fields of the pampa the hard and soft grasses are generally mixed, and by constant grazing the former are gradually exterminated. Thus throughout the sheep-ranges of this part of the province of Buenos Ayres only the soft grasses are now to be found, the pasturage having become thus refined by long use. In the outside country, which is more particularly devoted to the raising of horned cattle, the hard grasses predominate, the soft grasses only being found there growing between the isolated tufts of hard grasses. This is especially the case with the *alfilerillo*, a very succulent grass, which is only seen between the tufts, and which, spreading everywhere throughout the pampas, always springs up fresh, in all seasons, after a rain. This is also the case to some extent with the *trebol* or clover (spotted medic), which, from its luxuriant trailing growth and the great abundance of its seed, protected by prickly spiral pods, propagates itself very readily wherever it is aided by tufts of grass. It has, however, this disadvantage, that the seed-pods are a species of small bur (*caratella*), which sticks to the wool of the sheep and diminishes its value. In a day's ride over the pampas you will see all these various classes of hard and soft grasses growing up more or less together or alternating according to the nature of the soil, the hard grasses being more generally seen in the more elevated and the soft grasses in the more depressed portions of the country.

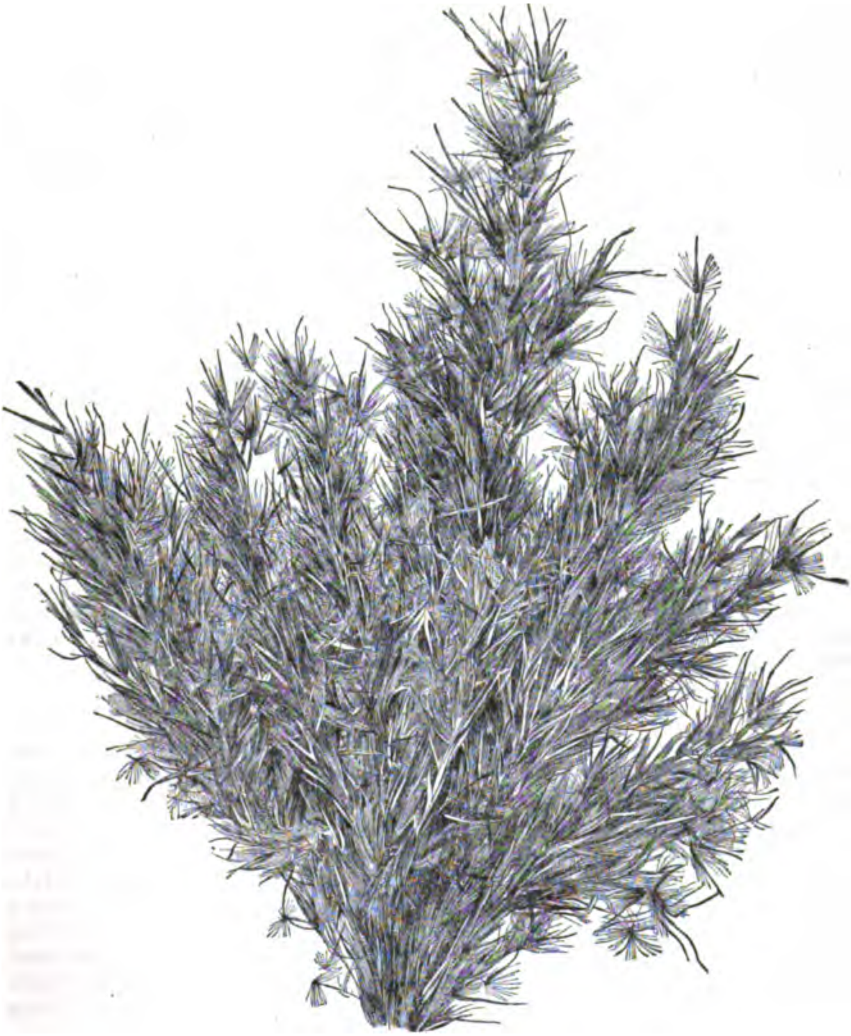
BLACK THISTLE.

I may mention here that there is another variety of thistle, which is not an annual but a perennial plant, which is of the nature of a wild artichoke, having the same color and foliage as the cultivated plant. The stem is quite stout and hard, and makes excellent fuel. It is sometimes called the "black" *cardo*. When young, cattle will eat it, but when it has matured its seed it is full of sharp nettles, which make a passage through it quite a disagreeable undertaking even for cattle. In the absence of timber the "camp-men" gather it in large quantities for fire-wood in winter. It is also used for burning brick.

THE PAMPA GRASS.

There are other tracts of country which, lying very low and wet, produce a coarse, reedy herbage, composed principally of species of *Dypa*, *Phalaris*, *Carex*, and pampa grass, which affords but little if anything in the way of nourishment; but growing very tall and spreading, furnishes shelter for whole herds of deer and a cover for partridges and martinets, while in the marshy grounds and lakes (*lagunas*), among these reeds, are to be seen myriads of wild ducks, plovers, cranes, spoonbills, flamingoes, geese, swans, and snipe in the season. These long reeds are used for thatching roofs, partition fences, and basket-making. But the pampa grass (*Gynerium argenteum*) is well deserving of special mention. I know nothing among our home flora which compares with it.

The pampa grass is a perennial, whose special habitat is the Andes, among the cordilleras of which it is found even 14,000 feet above the sea-level. It seems, however, to grow anywhere throughout the pampas. It is a most showy plant, growing in immense tufts, and when in blossom appearing like white sheets hung on poles, and can be seen at a distance of many miles. The leaves are hard, wiry, very rough at the edges, scarcely half an inch broad at the widest part, of a dull gray-green color, and edged all along by sharp teeth, which if pressed will cut like "a two-edged sword." The flowers, which appear in March and April on panicles, shoot up to a height of from 3 to 4 feet. They are of silvery whiteness, and are densely covered with long colorless hairs. The dimensions of one of the clumps (for they grow in clumps) are about as follows: Height of the stalk to the summit of the plume flowers, 11 feet; height to the curl of the leaves, 7 feet; diameter of the tussock, 9 feet; length of one of the leaves, 9 feet; length of flower-plumes, 4 feet; number of flower-plumes to a clump, from 15 to 20. Such is the magnitude of this queen of the grass family. Its elegance is more noteworthy than even its size—every one of its long, thong-like leaves curling gracefully from the center to the circumference, forming a thin but huge tuft that defies the pencil of the artist to do justice to it. Add to this the glittering whiteness of the panicles, which dart into the air on their slender stems far above the verdant tuft of the foliage, and shake their thousands of bright scales in the sunshine like the work of some ogre silversmith. As an ornament to a well-composed scene of rock and shrub nothing can equal it. With proper room and supported by fine masses of shrub its beauty is superb. I have been thus particular in the description in order that you may see how entirely fitted this plant is for garden decoration on account of its majestic outlines and magnificent flower-plumes. It arrives at greatest perfection in a cool clay soil. Strictly speaking, it is a river-side sedge, and can at all times be found along the banks of the thousand *arroyos* or small rivers which form the 50 miles of delta of the Paraná, or among the numerous small lakes (*lagunas*) which diversify the pampa, or interspersed among the hedge-rows of some of the country seats in the suburbs of Buenos Ayres. It requires abundance of water in summer. I inclose an illustration of the plant, except in the number of its plumes.



Pampa grass (*Gynerium argenteum*).

BURNING OF THE "CAMPS."

The tracts of land covered by these tall sedgy grasses are called *pajonales*, and when they do not lie too low they can be converted into excellent pasture by burning. This is generally done in the winter when the grasses have the sap out of them. These fires travel with the course of the wind, and, with the flames rising to a considerable height and careering in the darkness, they produce a singular effect in the night-time, uncovering, as they do, thousands of wild birds and animals which make their habitations in these jungles. Sometimes it takes several years of burning to redeem these lands, but ultimately the soft grasses will begin to show themselves. These fires readily burn themselves out, and it is not often that any damage is the result. "Camps" with coarse grasses are sometimes fired and refired in the same way.*

Sometimes, however, by the dropping of a lighted match or the careless disposition of the end of a cigar, a fire is started among the great thistle beds, the dry stems of which, in the summer-time, are like so much tinder or touch-wood, and then, unless it is promptly smothered, the losses are frequently very great. The dry thistles, intersecting each other and matted with the long dry grass and trefoil, extending over leagues of the pampa heated by the sun, are ripe for conflagration. If there is a breeze, the moment the grass ignites the blaze spreads right and left, and sweeping onward with a tremendous roar, it soon gains such breadth and such headway that it becomes almost irresistible in its course. Cattle, horses, and sheep fly terrified before it, the frightened herdsmen and shepherds galloping through the smoke, being sometimes utterly powerless to prevent them from being enveloped in the flames. The fire is finally subdued, if indeed it is suppressed before it runs its course, by the "camp-men" killing a number of horses, and then hitching two horses to their forelegs and two to their hind legs by means of "lassos," thus dragging the carcasses ahead of the track of the oncoming flames, in this manner clearing away the dried vegetation and leaving a space over which the flames do not pass.

SALINE PLANTS.

On towards the south of the province of Buenos Ayres, and especially when you enter the confines of Patagonia, both the soil and the vegetation become more and more salty. Saline efflorescences are found scattered over the whole of the province, and after a season of dry weather they become quite conspicuous; but real beds of common salt, more or less fine, appear to the far south and west. But little chance is there for sweet grasses where these exist, but on the edges of these deposits is found a vegetation of salt plants, of which the jume (*salicornia*) is the most common. It has no nutriment for animals, but its alkaline properties are most remarkable, containing as it does about 60 per cent. of soda and potash. Of all known plants the jume gives the greatest amount of ashes. This abundant distribution of salt gives this province a very decided advantage over those of the north, as the wild cattle will travel long distances in search of salt-licks.

GENERAL APPEARANCE OF THE ESTANCIA LANDS.

The idea which many have formed of the pampas, that they are a perfect level, is entirely inexact. They not only have a gradual rise towards the Andes, giving them a great altitude of many thousand feet before they reach the foot-hills, but the surface is also slightly undulating. At first sight the elevations and depressions are scarcely remarked, but they are soon recognized by the difference of vegetation. These undulations are of the greatest practical importance to the *estanciero*, since at the bottom of each one of these depressions small lakes (*lagunas*) are found, which provide the necessary water for flocks and herds which feed around them; and when these fail it can nearly always be procured by sinking shallow wells. From these the water is generally brought to the surface by means of buckets made of rawhide, suspended by tackle over a wheel and operated by horses, though of late American windmills to do the same work, by means of pumps, can be seen in all directions over the "camp." It is in these valleys especially that the tenderest herbage, mixed with flowers, is found. To this thick, grassy sward some other plants of different families are added, constituting a varied vegetation, whether it be composed of creepers with pulpous leaves, or of herbs, like the purslain, which form an appetizing nourishment for both man and beast. And then, charming the sight by the rich adornment and brilliant colors of their beautiful flowers, there will also be found the succulent *Portulacaceæ*, the vervains with their blood-red petals, the family *Compositæ* with their rich yellow blooms, and the papilionaceous plants, whose flowers look like butterflies fluttering in the sunshine. But nowhere is found that dense, compact, and magnificent sod which adds such a beauty to the pastures of blue-grass in the United States. The grass here rather grows in tufts, covering the soil like thousands of little islands, though at a little distance these grasses have the appearance of a compact sward, and are of a varied color, according to the season—bluish and clear green when the leaves begin to grow; a little later, brownish green, the color of the full-grown plant; and finally white as silver when the seeds ripen, and looking almost liquid at a distance as they undulate in the breeze. But when the midsummer or autumn has come, with a scorching sun and a want of rain, the aspect of the country undergoes a complete change. Then all is parched and brown. The thistle and the trefoil have disappeared, and the hard grasses have become dry and yellow. With a few summer showers, however, another growth of grasses will show itself under the shelter of the withered tufts, and the animals will be in no want of food.

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* The entire country outside the cities is called "camp," from the Spanish *campo*, country.

POISONOUS WEEDS.

It must not be supposed, however, that the pampas are without pernicious weeds mingled with the nutritious pasturage which they afford. There are poisonous plants as well, and in some districts the extent of land occupied by them is so great as to be beyond the ability of the *estancieros* to effect their eradication. Perhaps the worst of these is the *miomio*, or *romorillo*, which hungered stock will sometimes feed on, and which is a deadly poison. There are others not so poisonous, but almost as dangerous, whose botanical names I do not know, but which are called by the natives *abrojo*, *sepo caballo*, *biznaga*, &c., and which, where they exist in great quantities, render sheep farming utterly impossible, and only admit of cattle-grazing at certain seasons of the year. When the *abrojo* plant with its broad leaves nearly attains to its full growth it shades all other vegetation, and at seed-time no animal can enter it without being completely covered with the wonderfully tenacious seed-pods. The *sepo caballo* plant is also densely studded with thorns, and animals will not willingly go in among them until the plant is dying and the thorns are dropping off, and then the seed-pods attach themselves, like those of the *abrojo*, thus quite ruining the fleece. But the districts where these and like pests of the sheep-farmer abound are exceedingly limited compared with the wide stretches of nutritious pasture which everywhere are to be seen.

DROUGHTS AND STORMS.

With the wealth of pasturage, indeed, which exists in the Argentine Republic, and especially the provinces of Buenos Ayres, Santa Fé, Entre Rios, and Corrientes, it would seem that there could scarcely be a limit to the production of cattle and sheep. With the most ordinary attention this would probably be the case, but the *estancieros*, as I have already said, seldom spend a dollar for the maintenance, not to say comfort, of their flocks and herds. The wide pampa is spread out before them. They have the range of the broad leagues which each *estanciero* possesses, and from the time they are dropped until death overtakes them they are left to shift for themselves. During the spring and fall months, as we have seen, with an abundance of luxuriant grasses and succulent herbs on every side, they require but little oversight, but when the long droughts of summer come on and the second growth of grass does not appear, then, with streams and lakes dried up and no wells provided, immense losses are sustained. Cattle die by thousands and others stray away, sometimes to great distances, in search of food and water. In districts visited by drought to an unusual degree, sheep-farmers sometimes drive their sheep to other parts of the country, many leagues away, in order to save their flocks from starvation. And in the winter the situation is sometimes even worse. It is not unfrequently the case that the piercing southwest winds off the frozen Cordilleras will blow for weeks, bringing rain and sleet and snow, causing thousands upon thousands of animals to perish from exposure and hunger. Hurrying before one of these storms, I have known whole droves of cattle at last stopped in their mad career by some wire fence, and then dying piled up in masses upon each other. These losses, in the course of the year, amount to millions upon millions of both cattle and sheep.* And the natives call it *epedemia*, but epidemic has nothing whatever to do with it;† it is starvation and want of shelter. It is calculated that an acre of pasturage is required to properly feed one bullock or three sheep. But when you stock an *estancia* at the rate of three or four bullocks or six or seven sheep to the acre it must be an unusually good season for grass, with an unusually mild winter added in, if the animals manage to survive. It is this general tendency to overstocking which is the efficient cause of the dreadful mortality which yearly takes place among the cattle and sheep of the province of Buenos Ayres.

We are compelled to manage things better than this in the United States; and the result is that, no matter how protracted the droughts may be in summer or how severe the storms may be in winter, no such mortality among dumb cattle is ever known. We make provision for all such emergencies and contingencies. We make use of pasturage when we can; but we do not entirely depend on it. We harvest and save our hay; and "our hay is the most valuable by far of all our annual crops, the amount in 1880 exceeding 36,000,000 tons, on more than

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* Last year these losses were officially estimated at $17,958,000, gold.

† Latham's States of the River Plate, page 198. I may state here that I am indebted to Mr. Latham and papers of Professor Lorentz, of Cordova University, for much of the information contained in this report.

30,000,000 acres."* Here in the Argentine Republic some hay (alfalfa) is grown, but it is for special purposes. It is sold in the cities or is baled and shipped to Rio Janeiro. It can be grown here nearly all the year round, and five or six crops may be taken during the warm months from the same field. Its growth is something marvelous, from 6 to 7 tons of excellent hay being cut from a single acre. But there is hardly an *estanciero* who has an acre of it in cultivation. Planting and harvesting hay is too much like work; and so his flocks and herds have to take their chances without it. The *estanciero* not only makes no provision for winter feeding, but he does not even exhibit the humanity or oversight of planting a belt of timber to the windward of his stock in order to break the force of occasional storms, and thus give a shelter to his animals.

THE VALUE OF THESE ARGENTINE PASTURES.

But in spite of all these short-comings of the cattle and sheep farmer, in spite of drought and storms, in spite of the fearful losses which these annually entail, the pasturage of the pampas, in the vast number of animals which it feeds and fattens, year in and year out, is an enduring source of wealth to the Argentine Republic. It is part and parcel of the assured riches of the country. It is the source and support of a greater pastoral industry than perhaps any other nation in the world possesses, and has been the means, in a little over thirty years, of bringing the Argentine Republic in the matter of sheep and cattle products to the first rank of producing countries. No one can gallop, as I have done, over this illimitable sea of succulent grass, everywhere so beautifully interspersed with an unending succession of scarlet and white verbenas, and blue nemophilas, and purple plantains, and floss-like panicles, and pearl-studded plumes, and black-spotted medic, and a thousand other flowers with their variegated sheets of color, all indiscriminately furnishing food for the millions of sheep and cattle and horses which browse upon them, without feeling that with such a wealth of vegetation offering itself spontaneously and without labor to the country, there need be no anxiety in regard to the future greatness of the Argentine Republic.

E. L. BAKER,
Consul.

CONSULATE OF THE UNITED STATES,
Buenos Ayres, *March* 26, 1887.

IRRIGATION IN AUSTRALIA.

REPORT OF CONSUL GRIFFIN.

The recent publication of a series of elaborate reports by the various colonial governments on the conservation of water, together with the arrival in Sydney of a number of American engineers and capitalists interested in the science of irrigation, has awakened very general interest in the subject throughout Australia. The art of irrigation, however, as far as the colonies are concerned is only in its theoretical stage. It is true enough that a few persons have made a beginning, but as yet no important results have been attained. The method adopted here consists principally in pumping the water out of the rivers onto the land. American pumping appliances are usually employed, and are admitted by every one to be superior to all others.

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* Triumphant America, page 134.

MOUNTAIN SYSTEM OF AUSTRALIA.

It should be remembered, however, by those contemplating the inauguration of an extensive system of irrigation in Australia, that the conditions of the country here are altogether different from those in the United States. In the first place, unlike America, there are no large rivers and lofty mountains in Australia. Although the mountains in the latter country extend over a vast area, their average elevation is only about 3,000 feet. The highest peak in Australia, Mount Kosciusko (7,308 feet), is about 700 feet below perpetual snow.

The mountain system of Australia is described as a very simple one. It can, perhaps, be very well understood by a brief reference to the various ranges in the colony of New South Wales. The system is usually distinguished by four main ranges, viz, (1) the interior ranges, (2) the great dividing chains (3) the coast ranges, (4) the isolated peaks and groups.

The interior ranges approach the western boundary of the colony and form the western water-shed of the Darling River. The greatest elevation of the interior ranges is 2,000 feet.

The great dividing chain contains the highest peaks in Australia and runs throughout the whole of the island continent. It is subdivided into seven main branches and separates the eastern and western watersheds of the colony.

The coast ranges are on the east side of the great dividing chain and form the edge of the high table-land. The highest peak of the coast ranges is Mount Coolungera, 3,712 feet.

The isolated peaks and groups contain a considerable number of mountains, but all of them are below 3,000 feet in height.

THE RIVERS.

With the exception of a few small streams, all the rivers of the colony have their origin in the main dividing chain. The principal rivers of the eastern water-shed are the Hawkesbury, the Hunter, and Clarence. The Hawkesbury is 330 miles in length, the Hunter 300 miles, and the Clarence 240 miles. All the rivers of the eastern water-shed flow into the Pacific Ocean, and are estimated to drain an area of about 50,000 square miles. The principal rivers of the western water-shed are the Darling and its affluents, the Lachlan and its affluents, the Murrumbidgee and its affluents, and the Murray and its affluents. These rivers all eventually unite with the Murray, which empties into Lake Alexandria, near Adelaide, South Australia.

The Darling River is 1,160 miles in length. It drains, with its affluents, an area of 198,000 square miles. It is, however, a narrow stream and is navigable for only very small steamers.

The Murray River is 1,120 miles in length. It flows westerly and northwesterly through the whole of New South Wales and Victoria, and, as I have said previously, empties into the ocean near Adelaide. The average width of the Murray from Monara to Albury is about 240 feet, and the area drained by it and its affluents is 270,000 square miles.

There are no large fresh-water lakes in Australia, and indeed, with the exception of a few estuaries of the sea, they are all shallow and untrustworthy for water supply. In most cases they are mere depressions connected with the rivers, and receive their water only in times of flood.

LAKES AND CANALS.

It is maintained in the report of the royal commission of New South Wales for the conservation of water that there are three lakes in the course of the river Darling, each of which has an area of 60 square miles, and that their capacity is shown by the fact that when rapid falls occur in the Darling the overflow from them keeps the river navigable for nearly a fortnight longer than it would be otherwise. This, the report says, is an important feature, as the outlets from the Darling are in their natural state, and that with few exceptions no attempt has been made either to increase or regulate the supply of water.

In the lakes east of the Darling, in the county of Livingstone, an almost permanent supply of water is kept through the construction of a dam across Tallawalka Creek. The cost of this, about $20,000, was incurred by the lessees of the land. It is said that this dam threw the water into a series of lakes extending north and south a distance of 80 miles.

The report of the royal commission states that the levels of the country between the Murray and Murrumbidgee show that it is well adapted for the construction of canals. The country between the Lachlan and Murrumbidgee is more irregular, but the vast area lying between the Lachlan and the Darling, which appears as a blank on the maps of the colony, possesses some well-defined features. For instance, the waters of the Darling and Lachlan are ordinarily separated for about 200 miles, but in time of flood they spread out to within a distance of 25 or 30 miles of each other.

SCHEMES FOR IRRIGATION WORKS.

Mr. James Harold, of this city, who has had much experience in farming by irrigation in the United States, and to whom I am principally indebted for the material of this report, says that there is a great clamor throughout the colony for a grand national scheme of irrigation by those who have no knowledge whatever of the cost of such an enterprise, or from what source the water is expected to be obtained. The truth is, Australia has no lofty snow-capped mountains from which to draw supplies, and therefore the rivers and streams very naturally become dry at a time when water is most needed for irrigation purposes. Indeed during dry seasons the rivers amount to but little more than a chain of water-holes. The land-owners on both sides of the Groydir River, an affluent of the Darling, are all clamoring for the right to dam the river without even a thought of the injury it may do to others. Mr. Harold says that they do not seem to know that the lucky individual at the source of the river would get all the water and that the less fortunate one lower down the stream would not get any. It has been proposed by graziers to place weirs or obstructions in the rivers for the purpose of turning their flood-waters into the numerous blind creeks and depressions which are found in various places upon the plains. Mr. Harold, however, objects to this scheme for the reason that the country through which these rivers run is for the most part so level that the fall is only about 1 foot to the mile, and consequently the current is sluggish at best, whereas if obstructions were placed in them, the current would be more sluggish still, and the loss from evaporation, soakage, and capillary attraction would be enormous. At present, on account of the recent heavy fall of rain, the blind creeks and depressions along the plains are filled with water, but such water cannot very well be impounded. If numerous weirs were placed in these streams the water would soon cease to flow.

EVAPORATION.

There are numerous depressions on the western plains, from 8 to 10 feet deep. Many of these are partly formed by their banks being raised above the level of the surrounding plains, and if they could be kept full of water much of it could doubtless be drawn off by gravitation for irrigation purposes. These lakes, or depressions, so long as they contain water may be of great advantage to the farmer, but in time of drought they are dried up, and therefore cannot be depended upon. Mr. Harold says that the evaporation from these lakes will amount to about 10 or 12 inches per month, and that the thought of obtaining a permanent supply of water from them is altogether out of the question. In the report of the royal commission it is stated that various opinions exist among farmers and graziers as to the extent of the evaporation of these lakes; that some contend that it is as much as a footper month for three or four months, while others say that it will not amount to more than 3 feet per year.

The assistant engineer for roads, who is charged with the construction of tanks, says that from a tank containing 18 feet of water evaporation would not exceed 4 or 5 feet per year. It was stated at the inquiry of the royal commission that in the Groydir district 2,000 sheep were watered for more than a year from a tank 10 feet deep, and there was water in it then, although none had run into it the whole time.

One witness stated that the average depth of a swamp into which water has flowed from the Bulla River was fully 4 feet, and that the water lasted fifteen months before it disappeared from evaporation and soakage.

The conditions upon which observations are made differ materially. For instance, the report of the royal commission states that the hot winds, which are of comparatively rare occurrence in the coast district, and which range in temperature at Sydney from 80° to 106° Fahrenheit, are more frequent on the western plains, where the thermometer sometimes records 130°, and for days stands at 110° to 116°. It would be a mistake, however, to attribute this condition of wind to long periods, for the wind records show that as compared with the coast districts the country beyond the main dividing range has a comparatively tranquil atmosphere.

The subjoined table was furnished the commission by Mr. Russell, the government astronomer:

Result of observations with the tank evaporation.

Month.	Bourke.	Hay.	Hillston.
	Inches.	*Inches.*	*Inches.*
March	1.579		
April	4.770		
May	3.037		
June	2.858		
July	1.637		
August	3.793	2.762	2.074
September	3.975	2.736	3.280
October	7.559		

A series of experiments have recently been made by Mr. Russell for the purpose of testing the evaporation power of some of the larger lakes of the colony. In 1885 he placed a self-registering evaporation gauge in Lake George. This lake is about 19 miles in length and 6 in width. It is situated on the eastern side of the great dividing chain at an elevation of 2,200 feet above the level of the sea. Its waters, however, have no outlet, and consequently are strongly impregnated with salts. Lake George has never been known to overflow, and in dry weather it has failed entirely. The following table shows the results of Mr. Russell's experiments:

The water-gauge in Lake George.

Date.	Evaporation.		Rainfall.	Total loss by evaporation.	
	Reading of gauge.	Loss or gain.		Amount.	Months.
1885.	*Inches.*	*Inches.*	*Inches.*	*Inches.*	
March 1	2.8				
April 1	6.8	−4.0	0.44	4.44	March.
May 1	7.7	−0.9	1.54	2.44	April.
June 1	8.8	−1.1	1.92	5.03	May (very windy).
July 1	6.7	+2.1	3.42	1.32	June.
August 1	5.0	+1.7	1.82	0.12	July.
September 1	5.4	−0.4	1.06	1.46	August.
October 1	7.9	−2.5	1.15	3.65	September.
October 31	10.7	−2.8	1.74	4.54	October.
Total		−7.9	13.09	20.99	

In a note accompanying this table Mr. Russell states that he added only the rain which fell on the lake and not that which flowed into it, taking the mean of two rain-gauges, one at each end. He says further that during the last 14 years the lake has lost by evaporation 12 feet.

ARTESIAN AND OTHER WELLS.

The royal commission in reporting upon wells is unable to express an opinion as to the theory of an underground flow of water in Australia to the ocean. They mention that water has been found at Tarkania in South Australia, 150 miles from the western boundary of New South Wales, in latitude 29°, at a depth of 1,220 feet, or 1,040 feet below sea-level. The water rose 20 feet above the surface. Water was struck at Hergott Springs, also in the same colony, at 339 feet. The flow at Tarkania is only about 40 gallons per day, but the well at Hergott Springs yields 5,000 gallons per day. The diameter of the bore at Tarkania is 3 inches, and that at Hergott Springs is 6 inches.

A supply of fresh water was obtained at Bowrke, New South Wales, at a depth of 480 feet, and at another station near there at 550 feet.

The most important discovery of water in Australia, according to a recent report of Mr. H. I. Slee, superintendent of diamond drills for this colony, occurred during the present year at Wanaaring, Bowrke district, at a depth of 942 feet from the surface. The water was tapped on the 18th of February at 3 p. m., when it rose in tubes and flowed a steady stream, and has increased steadily in volume ever since. Mr. Slee is of opinion that this well will open up a tract of country hitherto impassable during seasons of drought. Under date of the 21st ultimo Mr. Slee writes:

In my reports in 1885 and 1886 (when it was under ministerial consideration whether or not these boring operations should be discontinued) I stated that I expected great results from the present boring operations on the road from Bourke to Wanaaring. If artesian water was tapped all along this road, which I believed would be the case, these boring operations would be successfully extended in the cretaceous basin to Wanaaring, Milparinka, and Mount Browne. In some parts the bores may have to be put down from 700 to 800 feet; in other parts from 400 to 600 feet might be probable depths. The greatest drawback in that remote part of New South Wales is the great scarcity of water, and if this was once overcome by artesian wells, all the stock and wool now finding its way from Cooper's Creek, Thargomindah, Mount Browne, and Mount Poole districts would be directed toward the Bourke Railway station and Sydney, and goods from the latter place would be forwarded in exchange. Great credit is due to Foreman Carmichael, who has rendered me every possible assistance, and who has had many hardships to undergo while boring operations were going on.

From personal inspection, and from my knowledge of the country, I expect further favorable results, both of the 18 and 93 mile bores.

To this report the under secretary for mines, Mr. Harrie Wood, attached the following encouraging minute:

> This is the deepest bore ever sunk in New South Wales by means of a water-auger, and the greatest credit is due to the superintendent and foreman for the manner in which they have conducted these works in the face of great difficulties.

The people in many districts have given up the practice of sinking for water from the fact that when found it is of a brackish nature, and depend principally upon tanks for the conservation of water. Of course the farmers have to wait for the wet season before their tanks can be filled. The tanks used are often too wide and shallow. In open tanks, from which the sheep take water freely, the loss is enormous through weak animals getting bogged. Tanks are less expensive than wells, but when the right kind of water cannot be found by ordinary sinking, the artesian well should be the farmers' main dependence. In some districts it has been noticed that in almost every case where water has been struck, salt water is invariably found at higher levels and not unfrequently near the surface. In these circumstances the presence of salt water should not discourage those from undertaking deeper explorations.

The colonial geologist accounts for the prevalence of salt water in the alluvial districts from the fact of its fresh-water origin. The débris washed from the ranges has been deposited quickly and the decompositions from the mineral constituents arising from the moisture has converted the fresh water into salt. Sulphate of alumina, lime, and magnesia have been formed, and salts chemically produced. In the marine formations the soluble parts of the mineral have been washed out by the long continued action of the sea water. When the water flows underground it is fresh, but whenever it is stationary, as it may be in clay beds a few yards from the current, it will become salt. The saline nature of the soil has given rise to well-marked peculiarities in the herbage, such as the salt bush.

Some good work in artesian boring has been done by private enterprise, but the great part of the work is left to the government. Mr. Harold, in reply to some interrogatories of mine on the subject of well-boring, says that the Australians need more than anything else a few good sets of the ordinary Pennsylvania oil-boring apparatus or appliances from 4 to 6 horse-power put into the hands of men who know how to work them.

In that portion of New South Wales known as the Riverina district, and which is drained by the Murray, abundance of water can be found at a depth of 80 feet, but there is small prospect of striking artesian water in that district as the country is of lacustrine formation, with a good clear soakage all along the course of the river. Artesian water, however, is found some distance back from the Murray on the plains where dikes of mineral-bearing rock occur. The most remarkable artesian belt in Australia occurs in the Liverpool Plains, in the northern part of New South Wales, but very little has been done to develop it. In the early history of the country water was very scarce in that district. All the rivers and creeks in the summer were turned into sand tracks. Wells were sunk there, and the water has continued to flow from them ever since. The greater part of the district is what may be called good boring country, and little trouble need be apprehended from the swelling of the surfaces of the bores, as little soapstone is met with.

THE RAINFALL.

So much is said about the drought of Australia that very few persons are aware that the average rainfall in all the colonies will compare favorably with that of other countries. In New South Wales, a territory of 310,000 square miles, the average rainfall is 24 inches. At Sydney it is about 50 inches, at Eden it is 70 inches, but in the flat country it is only about 10 inches. The average rainfall in Queensland is about the same as that of New South Wales. The former colony, however, is more subject to tropical rains than the latter. The rainfall, therefore, in Queensland rises in some districts, as for instance Johnstone River, to 123 inches; in other places the average is as low as 8 inches.

At Adelaide, South Australia, where there are no high coast ranges to arrest the drift of the clouds, the rainfall is as low as 20 inches. At Port Augusta it falls to 8 inches. At Perth, Western Australia, the average is 31 inches, but at Canaroon, in the same colony, it does not average more than 6 inches. At Eucla it is 10 inches. The rainfall in Victoria varies from 63 inches at Cape Schanck to 12 inches at Wycheproof. At Melbourne it is about 25 inches.

The trouble, however, in Australia is that whenever there is a diminished rainfall the effects are much more disastrous than in other places on account of the great heat of the sun and the absence of more general cultivation. A diminished rainfall of 50 per cent. has at times desolated vast tracts of country. The report of the New South Wales royal commission, however, states that while one part of the country suffers from a diminished rainfall other parts have an average supply and others again may be favored with an abundant fall. In the basin of the Darling, excluding the hilly portion, the rainfall is 12.81 inches. In the plains between the Lachlan and the Murrumbidgee it is 16.33 inches, and in the corresponding district between the Murrumbidgee and the Murray it is 14.56. These rainfalls would be sufficient for ordinary crops of cereals if they came at proper periods, but the report of the commission admits that they do not. It says that as a rule in these districts when rain is most needed it comes in such small quantities as to be of little or no benefit to vegetation.

STORAGE OF WATER.

One of the most difficult questions with which Australians have to deal in connection with the subject of irrigation is the best means for the storage of water. There is no doubt that much of the rainfall is of a temporary benefit only, on account of its tropical character, coming, as it does, in vast quantities at a time when it is not needed. The government astronomer states that rain fell to the depth of 10½ inches at Newcastle in less than two hours and a half, and that at the South Head, near Sydney, it fell at the rate of 1 inch per hour for more than twenty hours. The report of the New South Wales royal commission recommends the establishment of large reservoirs at the heads of the principal rivers and creeks and the placing of movable weirs across others in time of flood. They also recommend the establishment of sluice-gates to prevent the return of water to the main stream. Mr. Harold, in commenting upon the report of the commission, says that whatever is done for irrigation should be done by huge artificial water conservations in the mountains and by artesian and other wells. He says occasionally, in times of floods, water might be preserved, but it could not be depended upon. In conclusion he says that we should bear in mind that very fair crops can be grown over a large area in New South Wales without the aid of irrigation. He cites in support of this statement the fact that during the drought of 1886, one of the severest ever known, the average yield of wheat in these districts was 10½ bushels per acre. Mr. Harold says, however, that it is useless to think of irrigation for pastoral purposes in Australia, except upon a limited scale, as the cost would be too great. "It might answer," he says, "where land can be had at almost nothing, but where population increases the land will become more valuable, and it will be required to grow food for the people instead of grass for sheep."

RIPARIAN RIGHTS.

The New South Wales commission is very decided in the opinion that the riparian rights which exist under the common law of England are not at all applicable to the conditions of Australia, and that an attempt to enforce them would be a serious disturbance to the progress of the country in so far as that progress depends on the conservation of water. In the colony of Victoria no such rights can accrue, from the fact that the frontages to all rivers are reserved from sale. The conditions in New South Wales and other colonies are altogether different. Extensive alienations have taken place, which involve the legal rights of ownership to the middle of the beds of streams.

A memorandum as to what riparian rights really mean under the common law was prepared for the information of the commission by Mr. Alexander Oliver. In this memorandum Mr. Oliver quotes largely from Mr. Justice Story's opinion in the case of Tyler *v.* Wilkinson (4 Mason, U. S. Reports, 397), where it is laid down—

> That *prima facie* (*i. e.*, the law presumes) every proprietor upon each bank of a river is entitled to the land covered with water in front of the bank to the middle, the bed of the stream, or, as it is commonly expressed, *ad medium filium aquæ*. In virtue of his ownership he has a right to the use of the water flowing over it in its natural current without diminution or obstruction. Mr. Justice Story says that the consequence of this principle is that no proprietor has the right to use the water to the prejudice of another, and that it is wholly immaterial whether the party be a proprietor above or below in the course of the river, the right being common to all the proprietors; therefore no one has the right to diminish the quantity which will, according to the natural current, flow to the proprietor below or to throw it back upon the proprietor above.

In commenting upon Mr. Oliver's memorandum the commission states that riparian rights, as understood by the common law, are better adapted to England, where the people are more concerned to drain off the water as quickly as possible, than to New South Wales, where the all-important question is how best to retain it.

The commission does not find fault with the law which enables a riparian proprietor to restrain the action of those who construct works which have the effect of depriving him of participation in the advantage be spent in improvement upon 235,000 acres of Malley land, and the sum of $2,100,000 paid to the government.

This agreement met with vehement opposition in the colonial parliament, but after a series of protracted debates it was finally agreed that the Messrs. Chaffey Brothers should enter upon the occupation of their land.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Sydney, New South Wales, March 8, 1887.

PETROLEUM FUEL.

REPORT OF CONSULAR AGENT CHAMBERS, OF BATOUM.

In January there appeared in the Baku News (*Bakinskia Izvaistia*) a communication from Mr. F. V. Urquhart, a gentleman intimately connected with the Russian railways contiguous to the Volga, in which he gives the most complete, comprehensive, and accurate comparison of the results from coal and petroleum residuum fuel for locomotives that I have ever seen. It is not the result of a single experience, but of a year's use of each article, with the figures, in detail, upon which he bases his conclusions. That Mr. Urquhart is probably the most competent authority upon the subject in Russia (and, of course, the world, as nowhere else have the merits of petroleum fuel been so thoroughly tested) cannot be doubted, and that his system for burning petroleum residuum is the best, is, I think, conclusively proven by its almost universal adoption by the railways using that kind of fuel. The following is an abbreviated translation of Mr. Urquhart's communication, with the statistics given by him:

I deem it my duty to say that, thanks to your communications in 1883, regarding the great success in the use of petroleum residuum fuel in the locomotives of the Griazi-Tsaritzin Railway and the railways contiguous to the Volga River and the Caspian Sea, ordered special technical agents to familiarize themselves with the system of burning residuum, which, having overcome all technical difficulties (which up to that time had been the great obstacle in the way of the general use of this new fuel for steam engines), it can be said, had laid the foundation for its systematic use. After the Griazi-Tsaritzin Railway, the Tamboff-Saratoff Railway was the first to use my system of burning residuum, and the others soon followed, including the Trans-Caucasian and Trans-Caspian, by first adapting several locomotives to its use, in order to test it in comparison with other methods.

Four years have passed since the Griazi-Tsaritzin Railway began to use petroleum residuum fuel, and I take the liberty to communicate some of the results of my system as used upon the locomotives of that railway, which is the only one in the world using for all its locomotives (143) and stationary boilers (50) petroleum residuum fuel only; in fact, I can say without exaggeration that for making steam and in the shops of the company no other fuel is used.

The first conclusively successful trip of a locomotive using petroleum residuum fuel upon this railway was made in January, 1883, and was closely followed in the spring by an order to refit the locomotives for the use of the new fuel. By October 1, 1884, all of the locomotives had been changed to burn residuum. I gave you the result of this trial trip in 1883 compared with other methods of heating, and now present graphic statistical results from the use of residuum fuel in two types of locomotives used upon this railway in 1885, compared with results from the use of coal in the same machines in 1882. I will not go into details regarding the figures given, because they speak for themselves. In several cases 50 poods residuum were successfully substituted for 100 poods coal, but taking the average annual result, 56.3 poods residuum were equal to 100 poods coal.

Expenditure of coal in 1882 and petroleum residuum in 1885, inclusive of kindling-wood, on six-wheel engines at the lead of the train, and also those of the reserve, one and two engine for one engine verst.

WITH COAL IN 1882.

Month.	Aggregate number in the train.	Aggregate distance run by locomotives.	Aggregate distance of unproductive run of locomotives.	Aggregate distance run by freight cars.	Average consumption of fuel and its cost.	
					Coal.	Cost.
		Versts.	*Versts.*	*Versts.*	*Pounds.*	*Copecks.*
January	21.32	118,015	54,498	1,354,179	44.59	23.977
February	27.47	65,095	34,703	844,875	39.28	20.250
March	26.52	41,858	23,183	496,606	37.56	19.641
April	28.59	86,809	33,933	1,514,509	38.35	19.939
May	31.90	167,694	61,802	3,380,503	40.30	20.728
June	30.74	222,806	73,482	4,591,018	40.93	21.687
July	28.39	219,053	78,169	4,000,758	34.68	18.297
August	27.04	230,240	79,484	4,077,641	35.53	17.738
September	28.93	215,687	75,585	4,062,201	39.52	19.767
October	23.30	246,520	81,203	4,678,399	44.37	22.718
November	21.61	240,829	65,823	3,783,391	45.50	23.468
December	20.04	169,108	51,920	2,289,703	48.70	24.93
Total and average for year	26.73	2,053,344	716,741	35,073,788	40.78	21.11

WITH PETROLEUM RESIDUUM IN 1885.

Month.	Aggregate number in the train.	Aggregate distance run by locomotives.	Aggregate distance of unproductive run of locomotives.	Aggregate distance run by freight cars.	Average consumption of fuel and cost.	
					Residuum.	Cost.
		Versts.	*Versts.*	*Versts.*	*Pounds.*	*Copecks.*
January	22.14	172,236	69,461	2,276,026	24.52	12.24
February	22.01	135,231	56,582	1,731,609	24.28	12.40
March	22.58	134,163	50,862	1,655,267	20.64	12.36
April	25.33	213,552	73,385	3,551,038	22.60	13.24
May	28.49	271,301	99,525	4,894,425	21.28	11.77
June	28.35	218,204	83,479	3,820,671	21.32	10.97
July	24.77	198,101	72,401	3,114,183	19.64	9.51
August	28.27	193,906	70,403	3,492,526	20.48	10.70
September	31.89	197,355	69.515	4,077,052	22.84	11.67
October	28.04	189,327	57,717	3,693,639	25.32	13.05
November	21.41	180,677	54,689	3,697,697	25.46	13.37
December	22.15	139,309	51,540	1,944,033	27.16	14.73
Total and average for year	25.44	2,243,362	809,559	36,948,766	22.96	12.17

Average consumption of coal per verst in 1882 ....pounds.. 40.78
Average consumption of petroleum per verst in 1885 ....do.... 22.96
Saved on petroleum against coal in weight ....per cent.. 43.70
Unproductive run of locomotives:
  With coal in 1882, per cent. of aggregate 35.25
  With petroleum in 1885, per cent. of aggregate 36.08
Average cost per verst:
  With coal ....copecks.. 21
  With petroleum ....do.... 12.17
Saved on petroleum against coal in cost ....per cent.. 43.35
Average yearly cost per pood:
  Of coal ....copecks.. 21.17
  Of petroleum ....do.... 21.19
100 pounds coal=56.3 poods petroleum; 100 rubles coal=57.65 rubles petroleum.

With such a considerable run as is made by the locomotives upon the Griazi-Tsaritzin Railway, the gross annual saving to the company from the use of residuum fuel in locomotives and stationary boilers, and from indirect savings in repairs, will be about 450,000 rubles ($200,000).

The comparative cost of moving 1,000 car axles per verst given below from the official reports of the Griazi-Tsaritzin Railway, eloquently points to the great signification of petroleum fuel for railway purposes.

the article at Baku, 70 cents per ton free on board, the rate of freight in bulk from Baku to Batoum, with the expense of pumping into tanks and vessels at $4.95 per ton (which is also the minimum, admitting the railway capacity to be unlimited, which it never can be), and the sea freight the same as is charged by steamers to Odessa (a shorter run), $2.80 per ton, the actual cost of residuum at Constantinople will be $8.45 per ton, to which not less than 10 per cent. must be added for profit and expenses there, and we have $9.30 as a fair selling price there, against English coal at $5 and $5.25 per ton. As Malta is five or six days farther than Constantinople, and English coal worth about $4 or $4.25 per ton there, delivering residuum there is wholly out of the question.

The great and only inducement held out to ship-owners to abandon the use of a known and tried fuel, the supply of which is assured, and to alter their steamers to burn a new fuel, the supply of which is exceedingly uncertain, and the expense of which, even under the most favorable circumstances that can at present exist, must be greater than coal, is that a pipe-line from Baku to Batoum will soon be constructed, refineries erected on the Black Sea coast, and residuum will be given away in sufficient quantities to supply the world.

PROPOSED PIPE-LINE.

In a former communication I alluded to the much talked of concession offered by the Russian Government for the construction of a pipe-line from Baku to the Black Sea. To show what is conceded it is unnecessary to quote the conditions of this concession entire, but simply to give the following extracts from them: First. All pipe, machinery, and material for the line must be manufactured in Russia and from Russian material. Second. The Government will exercise the most strict control of the line, to see that no one having an interest in it has any other direct or indirect interest in producing, refining, or trading in petroleum products, which is strictly forbidden. Third. The minimum charge for transportation from the wells to the Black Sea is about 39 cents per barrel of 42 gallons, a distance of 560 miles (against 45 cents per barrel charges in America for 300 miles); and last, the whole construction of the line is to become the property of the Government after seventy-five years, which means that none of the material can from time to time be removed for use elsewhere. There is also a small Government tax to be paid by the company owning the line, equal to the present value of the crude oil at the wells.

Is it at all strange that capitalists of a sufficiently philanthropic turn of mind (excepting, of course, newspaper and prospectus writers) to accept this remarkable concession (?) seem very slow about coming forward?

Recently some of the enthusiastic advocates of a Baku-Batoum pipe-line, petroleum fuel, &c., have called attention to the railway now being constructed from what they term the "Black Sea petroleum field" to Novorossisk, as affording a future outlet for petroleum fuel to the Black Sea. They are either ignorant of the fact that a pipe-line from the "Black Sea petroleum field" to Novorossisk has been in existence for three years, or they are slightly inconsistent in urging a railway where a pipe-line exists and a pipe-line where there is a railway. It is barely possible, however, that they know something of the nature of Novorossisk oil (or what used to be found near that place, as it is a thing of the past) which is 0.950 to 0.975° specific gravity, and think it can be transported more economically in rack cars, in bulk, than by pipe-line.

has declined from $73,542,000 to $51,170,000. This decline in the import of grain lies in the falling off in the consumption. The export of manufactured articles has in some respect considerably increased. For instance, the export of silk goods has risen from $31,773,000 to $38,913,000, woolen goods from $37,842,000 to $41,050,000, and hosiery from $20,944,000 to $24,752,000. The export of clothes, ready-made linen, and millinery goods amounted to $20,658,000 in 1885, and $23,216,900 in 1886; laces, embroideries, and silk laces rose from $9,146,340 to $14,113,400, and hardware and jewelry from $19,232,750 to $21,950,740 for the same periods. The import of machinery, instruments, and apparatus has decreased by $2,284,000, and the export by $654,500. Of cattle and other living animals the import has decreased by $4,274,000, and the export by $3,689,000. The export of sugar, sirups, and molasses has risen from 623,903 tons to 635,321 tons. Raw fat and grease materials show a decrease of import to the extent of $1,438,520, and of export to the extent of $150,000. The import of manufactured goods has declined by $2,246,720, and the export by $435,540. The value of the imports of pottery, earthenware, porcelain, and glassware exceeds the value of the exports.

These figures show a marked turn in favor of the trade of Germany for the year 1886, and the crisis of 1885, which threatened to continue in 1886, was thus overcome.

WM. D. WAMER,
Consul.

UNITED STATES CONSULATE,
Cologne, April 21, 1887.

THE PROJECT FOR UTILIZING THE RHINE FALL.

REPORT OF CONSUL CATLIN.

In this practical age of inventions and progress, where the telegraph pole and the factory chimney rear themselves against the horizons of every landscape; where mountain fastnesses and remote valleys, long consecrated to the charms of nature alone, now resound with the whistle of steam and the stroke of the hammer; and where the iconoclastic hand of enterprise, divested of all sentiment, is reaching out into every nook and corner of the universe to discover and develop new commercial opportunities and resources—in such an age it is not surprising that an application backed by large capital has recently been made for a concession to utilize for the manufacture of aluminium the water-power of the largest cataract in Europe, the falls of the Rhine at Schaffhausen, in this consular district.

Some 25 miles below the point where it issues from the Lake of Constance the Rhine, with a width of 350 and an average depth of about 21 feet, plunges over a barrier of rocks varying in height from 45 feet on the right bank to about 60 feet on the left. Including the rapids the total fall within a distance of a little over a third of a mile is estimated at 150 feet.

VOLUME OF WATER.

The volume of water passing over the falls per second varies from a minimum of 118 cubic meters in February to a maximum of 502 cubic meters in July, when, in consequence of the melting of the snows in

tion the necessary maps, plans, and drawings. They further announce that a stock company, with a capital of 12,000,000 francs, is prepared to conduct the enterprise, and they offer all reasonable guarantees against any marring or defacement of the natural beauties of the falls.

But now come the hotel kings, men of influence in Switzerland, and many others like them dependent upon the so-called "*Fremden Industrie*," or tourist business, and enter a vigorous protest against the granting of this or any other similar concession. From time immemorial, say they, the fame and beauty of this cataract and its surroundings have attracted to this section of Switzerland annually increasing throngs of strangers from all parts of Europe and America, who bring with them in the aggregate large sums of money, and impart an impetus to every branch of trade and travel.

Mar the charms of this great waterfall, diminish or destroy its attractiveness and what, argue they, will be the result? An immediate falling off in the tide of summer travel hitherward, a consequent shrinkage in the value of the palatial and costly hotels of Northeastern Switzerland, and a blight upon all the thousand and one branches of business which, lying dormant all winter, blossom and thrive during the tourist season from May to October. And not only in Schaffhausen, but also in Zurich, Lucerne, Ragatz, and all the pleasant summer resorts along the beautiful Lake of Constance would such a shrinkage in tourist travel operate disastrously. Zurich, which is spending millions in beautifying her lake front, and rendering herself still more attractive to strangers, enters through her hotel keepers' association an especially vigorous protest against the project, and her cantonal government, to which of right the application is referred, promptly vetoes it.

THEIR ADVANTAGES.

But notwithstanding the veto, the petitioners return to the charge, alleging that their project involves no injury to the beauty of the falls, and fortifying this assertion by an offer to furnish any reasonable guarantee to that effect. In this form the matter at present stands. It is a question of the practical *versus* the æsthetic. The one side says, "Let us develop our natural industrial resources and opportunities, and let sentiment go;" the other side replies, "See, America has protected Niagara by making it the center of a national park. Cannot as much be done for the Niagara of Switzerland?"

Without expressing any opinion other than that the project seems a most advantageous and feasible one, and that the objections against it do not appear well grounded, I append herewith a translated extract from a communication which recently appeared in the *Neue Züricher Zeitung*, of this city, and which certainly presents the case in a sensible and practical light. The writer says:

> If, for instance, some one should come and ask a concession for the establishment of a mammoth cotton-mill, we should say to him, "There is no good reason why you should pitch upon the Rhine fall. You can find elsewhere in Switzerland water-power sufficient to carry on your undertaking. Moreover, we are well posted on the cotton industry; it is nothing new with us, and we doubt in any case, whether your prospect is calculated to pour any fresh oil into the waning lamps of Swiss industry. What we need are new industries which show a prospect of thriving and of furnishing employment to thousands who must otherwise emigrate."
>
> But in the present case we have to do with a new industry, which may possibly bring about a very great industrial revolution. The new cheap process for manufacturing aluminum can only be carried on where enormous water-power is available.
>
> The auxiliary use of steam would be too expensive, even were the engines stationed directly over coal magazines. The prosecution of the aluminum industry is, as a first

HORSE-BREEDING.

The interest manifested by the Government in obtaining good clean-blooded horses from Normandy for breeding purposes is deserving of unstinted praise. Every year the best obtainable stud-horses have been purchased and sold again, at very moderate prices, to agricultural societies in the various districts, for use in propagating good stock. Sometimes they are sold also to corporations and to private parties. Then, again, in many cases the Government allows certain amounts of money to owners of such animals, enough for their keeping. Again, premiums in money amounting to thousands of dollars are given yearly to those producing the best results. Men possessed of the necessary technical knowledge go from village to village, holding meetings and giving instruction in the care and breeding of horses. The magnificent brutes, marvels of strength and beauty, which one sees, worthy offspring of their Norman sires, speak eloquently for the steady care and intelligent selection of the Baden authorities.

A law has been passed and put in full operation, under which a commission is appointed and charged with looking after and examining the various studs, public and private, and declaring as to their fitness for breeding purposes. No stud is allowed to be used for such purposes unless the owner or owners can show a certificate signed and sealed by this commission acknowledging the stud's qualifications as a breeder. These certificates are good only for a year. Of course this commission is composed of men skilled in the breeding or possessing technical knowledge in relation to horse-breeding. Everywhere an intelligent interest has been awakened. The little village meetings have done much good in encouraging thought in the matter of selection of good blood and in preventing the thousand and one evils to which young horses are liable. The many evils consequent upon bad shoeing and carelessness in regard to stalls, &c., &c., have been partially removed. A new movement is on foot to establish courses for young men studying horse-shoeing in order to give them full technical knowledge of the hoof and its care. The last report I have been able to see gives the amount of money spent in encouraging horse-breeding at 72,262 marks, or about $17,183. It has averaged that much for the last ten years. Thus we find government intelligently working with nature in carrying out her great law in seeing that only the fittest shall survive.

ANALYSIS STATION.

The scientific analyses which the agricultural analysis station makes every year are given to the public through the columns of various agricultural papers. The principal work done by this organization, noted in its last report, was as follows:

(1) In regard to wine: Influence of the dross, or pomace, of the acetates and sulphurous ingredients. The influence of allowing the juice to heat, both upon its working, fermenting, and upon the wine afterwards. The good or bad results from mixing stuff with the wine to cause the slime to settle and of adding foreign material, such as roots and herbs, to change the flavor, &c. Experiments are made in the production of a cheap wine for general use out of fruits, thus allowing the farmers to keep their grape wines for commerce. Experiments were also made with a view to seeking methods of improving wine of poorer quality.

(2) In regard to discovering attempts at adulteration of wine, all of which are very severely punished; 3,071 cases were examined during the last year.

(3) Analyses of dungs and various manures; experiments with the same upon vines, plants, trees, and vegetables.

(4) Experiments with the various kinds of waters and essences produced; analyses of the same, &c.

(5) Experiments with, and tests of, methods for producing rennet essence.

(6) Analyses of manures mixed with loam, and experiments with the same; analyses and tests of butters, flour and meals, barleys, various kinds of feed and fodder, as well as analyses of drinking-water.

(7) In producing means for destroying the various plant diseases and for getting rid of and preventing the growth of harmful insects of every kind.

The station sent out numberless useful and instructive articles on the various matters treated; took also a lively interest in securing and sending out men to lecture upon the best methods of wine culture and treatment; concerning cows; the production of milk, cheese, and butter, and upon the best methods to be employed in planting and producing potatoes. Special attention was given to the matter of watching for and guarding against that dread disease of the vineyards, phylloxera. Special courses were given for this purpose, and special boards appointed to watch, report, and take measures of safety against the very first appearance of the disease.

Many agricultural exhibitions were inaugurated and held under the direction of this station, always with the best results. At these exhibitions all manner of books and models calculated to inform or instruct the husbandman are put on exhibition, all kinds of apparatus, implements, and machines also. Chemical analyses of vegetables were made, in the presence of the people gathered, and explained. The potato was especially treated in this manner. The greatest service, however, done by the station was in answering the thousands of questions submitted to it during the year from all parts of the state.

It might be well to add at this point that agents of American tools, implements, machines, &c., might find a successful sale for their goods by having them exhibited at these fairs, exhibitions, &c., and at the great country fairs. These occur regularly three times a year, the greatest, one, that always awakens great interest, occurring each May, called the "Annual May Market."

RESULTS.

The great advantage which seems to attach to all these institutions is their closeness to the people. Then, too, the constant application of their methods and instruction makes it after a time familiar.

Much of the success of our German farmers in the West may be traced to their early training. It is not an unusual thing to meet an ordinary farmer who is able to tell you some of the great laws of nature; that like needs like to produce it; that what is taken from the soil must be put back in some way or other; that is, to soil from which wheat, oats, rye, and barley have been taken, nitrogen and silica must be given if the soil is not to be impoverished. Where lime-plants, clover, beans, peas, &c., have been grown, lime, from bone meal, must be returned. Soil that has yielded beets, mangel roots, turnips, &c., must be restored by an application of carbonates and nitrates of potash. Where piping is too dear for irrigation, the farmer is taught the value of open or covered ditches. At these evening meetings the farmer learns that a purely clayey soil hardens and tears the roots, while soil with a judicious mixture of sand keeps the soil in a just state of porosity for absorbing gases and heat and imparting the same in even proportions to the roots. He learns what kinds of sands are and are not dissoluble in water, and hence assimilable or unassimilable; that humus must be applied to dry areas; that the soil must be constantly turned for contact with the air, from which it absorbs ammoniacal gases, but holds them so lightly that they are easily drawn over to the young roots, which are ever greedily sucking in nourishment; and so on *ad infinitum.*

GOVERNMENT ASSISTANCE TO AGRICULTURE.

During the last eight or ten years the Baden Government has placed yearly the sum of 234,550 marks to be used in agricultural purposes. This money finds its way into various channels for stimulating excellences in culture and for all the various purposes found in encouraging agricultural pursuits. Besides the above amount 28,000 marks were voted to the Central Agricultural Society, which were used by that society in various purposes, all of which have the interests of agriculture as objective point. The Central Society expended an additional 12,250 marks from its own income. Single districts of Baden, viz, Lórrach, Freiburg, and Offenburg, advanced each the sum of 30,000 marks to be used in premiums for high standards in cattle breeding and improvements in fruit trees. The different agricultural clubs or unions, one of which exists in almost every village, spent about 50,000 marks last year for encouraging enterprise in agriculture. Thus the state, the central. and district unions, &c., spent last year the neat little sum of 414,800 marks, or about 50 marks per hectare of agricultural surface. To this sum should be added 320,000 voted to cover losses occasioned by storms and the various catastrophes to which agricultural products are liable; thus we get a total of 734,800 marks. There are about 800,000 hectares under cultivation. Forty-nine thousand five hundred and thirty marks were spent for the encouragement of agriculture in general; 78,360 for advancing the breeding of horses; 13,720 for improvement of cows, hogs, &c.; 5,900 for fish; 650 for bee-raising; 80,200 for improving and clearing fields; 77,680 for lectures, instruction, &c.; 11,000 for making experiments, chemical and otherwise.

Wherever unsatisfactory results have been reported investigations have been instituted, always resulting in the same verdict, that failure is attributable to unskillful use of farming implements; carelessness in gathering, storing, preparing, and mixing of the manures; in not making a good use of seeds; in neglecting to root out or choke back weeds; to destroy insects in time, or other things injurious to the plants; in a too limited care to provide for or against accidental dangers, such as hail, fire, frost, &c., by sufficient insurance; in the imperfect manner in which the fruit is too often gathered, assorted, and stored; finally, in an imperfect and unskillful arrangement and manipulation of the things intended for sale. To remove all these evils, none of which need to exist, and to guard against their future recurrence, no effort was spared by the teachers, who went from place to place giving lessons and lectures with as much faithfulness and interest as if a certain percentage of all the profits were to be awarded them. The same may be said of those men having in charge the publication of the agricultural papers and pamphlets. The mistakes, continually censured and referred to, are growing beautifully less. To expect them to disappear entirely would be expecting perfection, a state hardly attainable by human beings in any state, much less that of farmers, whose lives are filled with ceaseless toil.

them out in the best manner possible for their future calling; and to do this at the least possible expense to the pupil. To accomplish this the course is so arranged that theory is being constantly demonstrated by practice. The result is that the scholar, even during the two years' course, in contact with teaching and experiment, masters the principles, and returns to hillside and valley to put them in practice. The course embraces the simplest elements of natural science applicable to agriculture, special attention being given to those branches particularly fitted for the school district. Lessons are also given in practical mathematics, reading, and writing. The work of the teachers is very much simplified and assisted by carefully and accurately constructed charts, diagrams, and models; by a good, well-selected library, and by visits and practical talks and demonstrations on the part of successful, well-known, well-skilled farmers.

THE SCHOOL COURSE.

The school course embraces two winters, of five months each, from November 1 to the latter part of March. The course is so arranged, however, that persons unable to return the second year carry away from the first winter's training so much of the best practical training that the loss of the second course is not very great. Still, the teachers all agree that it would be much better for themselves and the scholars if those who enter would complete the course. The second year's work is largely review and demonstration of the first winter's work. When the review is completed as much new ground is opened and gone over as time and thoroughness permit.

The present age, with its restless spirit of search for and improvement in methods of transportation in conducting all kinds of business enterprise, is working great changes in the matter of securing profits from agricultural investments. To-day the farmer must broaden the scope of his intellectual horizon, since he is now in closer relationship with cities distant a thousand miles than he was formerly with those removed only a hundred. To his ability to plough and reap and sow he must add some knowledge. To-day he needs to be as much merchant as farmer, hence he must learn business methods. To-day he has money to invest. The stocking, the hole in the wall or ground have given place to the bank, bonds, rents, mortgages. All kinds of instruments, implements, machines for making labor easy, for preserving fruits and vegetables; are being offered; the farmer must know how to select. In a word, the husbandman of to-day must know ten times as much of what the world calls general and technical knowledge, outside of mere sowing and reaping, as was required of the farmer of fifty years ago. To help the farmer to acquire this information and to teach him how to use it when acquired is the purpose of these agricultural schools. The children of farmers leave the schools practically, as well as theoretically, prepared to help their parents in all the duties and labors of life. Wherever these scholars go the fields and vineyards take a new appearance, the cattle appear different, the barn-yard and stables more orderly, and the earth yields larger quantities and better qualities of fruits and vegetables than ever before. Taught the advantage of co-operative labor, families unite their fields, cultivate them in common, and buy new and improved machines to use in common, which would be too expensive for one or two to purchase. In this way a new charm has been added to rural pastoral life such as it never knew before. The motto that "many hands make labor light" is true in more senses than one, scientific instruments were supplied. The library was constantly in use, teachers interesting themselves in directing the young readers. Finally excursions were made to neighboring farms, fields, and vineyards to witness regular work and experiments performed by practical farmers. Upon all these excursions the teachers went along to make suggestions, explain methods, and answer questions. It is easy to understand that such methods were crowned with complete success; the interest of the teacher in his work being often surpassed by the scholar's enthusiasm. During the school year money was presented to the "direction" to be used in buying instruments and in granting premiums for good work. Money was also supplied to secure the services of special teachers when such were needed. These moneys came from the grand ducal government, agricultural unions, and private citizens. Hundreds of young fruit-trees were purchased by admiring friends of the school and scholars, and presented to the graduates. These trees will always be the objects of special care.

BOARD OF INSPECTORS AND DIRECTORS.

Each school has a board of directors composed of the leading citizens of the villages in the district. Generally the village mayor (*Burgermeister*) and selectmen serve on these boards.

The corps of teachers last year were, (1) teacher of agriculture; (2) two well qualified teachers of various branches, language, drawing, and penmanship; (3) teacher of treatment of animals; (4) a general helper.

"TEACHERS' HELP," APPARATUS, BOOKS, &C.

(1) A very large and fine collection of chemical and physical apparatus, Dr. Bopp's wall maps and charts for teaching physics.

(2) A collection of models and geometrical bodies, with the necessary implements for teaching mechanics, geometry, and mensuration.

(3) A collection of minerals and stones in three hundred cases.

(4) A geognostic map of Mannheim and one of Baden, Wurtemberg, and Hohenzollern land. A mountain and valley map of Baden and Wurtemburg. A large globe and physical map of Europe.

(5) A collection of seeds.

(6) A large microscope and a large collection of microscopical preparations.

(7) A collection of models of agricultural implements.

(8) A collection of dungs, manures, &c.

(9) A selection of a horse, with many different anatomical preparations, such as hoofs, teeth, &c.

(10) A numerous collection of drawings and pictures of neat cattle, different breeds of horses, useful and harmful animals and insects; the best kinds of fruits; plans for drainage, irrigation, directing water for use at a mill with undershot and overshot wheels; drawings of instruments to be used in clearing a field of rocks and stumps, besides many maps for a hundred purposes.

(11) The wall maps for teaching botany and exhibiting diseases of plants, prepared by Dr. Ahles.

(12) A collection of about four hundred choice books relating to the subjects studied, and agriculture particularly.

(13) Most of the regular agricultural magazines and journals.

(14) Geognostic wall map, by Dr. Fraas.

(15) Two wall maps illustrating fruit-tree culture and planting, by Dr. Lucas.

METHOD OF INSTRUCTION.

GERMAN LANGUAGE.

Lecture and reading to both classes of prose and poetical selections from standard authors, with comments and explanations as to style, &c. For the first class, writing of essays on general topics, letters, and business essays.

BREEDING OF ANIMALS.

General view of all classes of the animal kingdom, special reference being made to those servicable and useful to the farmer as well as those which are destructive. The chemical constituents and form of the various parts of animals. The organs of the animal, their manner of working when in a state of health and when diseased, special attention being given to the organs of digestion, assimilation, and breathing. instruction in breeding, feeding, rearing, and employment of domestic animals for agricultural purposes.

GENERAL INSTRUCTION NECESSARY TO CONDUCTING AGRICULTURAL BUSINESS SUCCESSFULLY.

(1) As to funded capital, (2) working capital, (3) gross receipts, (4) net results, (5) insurance, (6) importance of agricultural unions and co-operation; improvement of farms, fields, &c., by constructing good roads, paths, &c.; irrigation, drainage, and fruit-raising.

All these subjects received careful and special attention. In the matter of agricultural book-keeping each person was compelled to write out an inventory and prepare a cash-book, as if kept for a small farm. Thus the matter was made so practical that to forget it was rendered almost impossible. The branches under N. B.—C, D, and E took twenty-five hours a week. Term for 1887-'88 begins November 3, 1887.

The committee express the opinion that children under fifteen years should not be sent to the agricultural school, only in exceptional cases. Since the course consists of five months only, each pupil should appear prompt on the day of opening and attend regularly to the close.

It may not be without good result to note the following:

The cost for a winter's course is 10 marks, or $2.50. Children not able to pay even that sum are admitted free upon request or statement of inability.

Persons who enter and complete both terms pay nothing.

Attendance at the agricultural school will be accepted by the authorities as equivalent to the same time in another school under obligation.

Attendance at the agricultural school relieves a scholar from further compulsory attendance at school, provided he has completed the agricultural course successfully.

Reading books, geometric and drawing instruments, &c., are provided by the school free for the most part, a few being lent for a mere trifle to defray expense of renewing.

The expense for the necessary writing material comes to 10 or 15 marks, $2.50 or $3.75. Scholars living at a distance will be taken into respectable families in the village at 1.20 to 1.50 marks per day—that is from 28 to 35 cents per day. Every farmer's son over fifteen, bearing a good name, will be admitted upon application.

For those scholars who live at a distance and are too poor to attend funds are provided to defray both their school and traveling expenses. No boy desiring shall be denied an education. Applications for admission may be made during the entire year to the teachers and board of directors.

Upon a system so excellent, so near to the people, so simple and practical in all its details and workings, so calculated to inspire confidence and support, comment is unnecessary.

J. C. MONAGHAN,
Consul.

UNITED STATES CONSULATE,
Mannheim, March 28, 1887.

IRON MANUFACTURE IN SCOTLAND.

REPORT OF CONSUL UNDERWOOD.

THE COLTNESS WORKS.

The Coltness Iron Works are located in Lanarkshire, Scotland, about 16 miles southeast of Glasgow. The means of communication are by the Caledonian and North British Railways.

There are twelve furnaces, of which nine have a height of 52 feet, two of 65 feet, and one of 72 feet. The greatest diameter of any furnace is 17 feet; the average cubic contents of each is 10,000 feet. Eleven of them have closed tops, and one has an open top.

Men employed in moving material from unloading place to furnace, two and one-half men per shift for each furnace, paid 4*s.* 3*d.* each per shift. Horses and carts are not so employed.

No men are employed in breaking ore or limestone. Limestone is broken by machinery—Blake's breaker.

Of furnace hands the number of bottom-fillers per shift per furnace is two and a half.

TRANSPORTATION.

The average distance that materials have to be wheeled is from 40 to 50 yards. A barrow-load consists of 18 or 20 cwt.

There are no top-fillers. In molding there is employed one boy per shift per furnace; for running the cinder a keeper and an assistant; for running the iron a keeper, an assistant, and fillers.

The iron is run into sand molds. The cinder is run into iron trucks containing 3 or 4 tons, and is hauled about half a mile from furnace to tips. The weight of cinder per ton of iron is about 15 cwt. The men in the foregoing list do not help or remove the iron from the beds. One pig-lifter per furnace removes it. Wages are 30 shillings per week. Iron is moved from furnace 18, 29, and 37 miles, respectively, to shipping points, and is handled but once from beds to railway wagons. It is weighed both at the furnaces and at the railway wagons.

LABOR.

There are fourteen shifts per week. For tending hot-blast heaters one man is required for three furnaces; two are employed in cleaning yard; five in loading iron; two in other yard work; four on cinder tip; nineteen general laborers.

PRODUCT AND COST.

The average annual production of pig-iron is about 100,000 tons. The average annual production per man is 33 tons; average fuel per ton of iron is 46 cwt.; ore per ton of iron is 38 cwt.; flux per ton of iron is 15 cwt. The quantity of ore charged per ton of pig-iron produced is 38 cwt.

The cost of ore per ton charged into the furnace, including royalty paid, labor, materials, and general expense of mining, transportation to furnace, and waste in handling, is 14 shillings.

In the flux (limestone) the percentage of lime is 38 per cent., of magnesia 12 per cent., of aluminum 20 per cent., and of silica 30 per cent.

The cost of flux per ton charged into the furnace, including royalty, labor, materials, and general expense of quarrying, transportation to furnace, and allowance for waste, is 4*s.* 6*d.*

In the fuel the percentage of carbon is 52 per cent., and of ash 3½ per cent. The cost of fuel per ton charged into the furnace, including royalty, labor, materials, and general expense in mining, transportation to furnace, and allowance for waste, is 5*s.*

The cost per ton of iron produced, of supplies for engine-room, blacksmith and repair shops, castings and tools consumed, &c., is 1*s.* 6*d.*

The Coltness Company do not extract sulphate of ammonia nor coal-tar from the gas that is burned under their furnaces, nor has it any apparatus for that purpose. In the opinion of the company the prices of those products are so low at present there is no profit in separating and saving them.

F. H. UNDERWOOD,
Consul.

UNITED STATES CONSULATE,
Glasgow, April 6, 1887.

According to the figures of the minister of agriculture, the quantity of eggs imported was about 540,000 ounces (27 ounces to the kilogram). Subtracting the 35,000 Japanese, 500,000 ounces would represent approximately the quantity of other species of eggs imported, which are almost exclusively the yellow French eggs. This is evidently erroneous, as the quantity of the Italian eggs is known to be greater than the quantity of the French eggs imported, and this would not agree with the figures given above, which are from a most reliable source.

Taking the average yield of Nos. 1 and 2 of the above table at about 35 kilograms per ounce of eggs, and of Nos. 3, 4, and 5 at about 30 kilograms, the total crop would reach some 41,000,000 kilograms, corresponding to the figure in the table given below. This is a very favorable result for the cultivators, the average of 33.31 kilograms of silk to the ounce of eggs being decidedly above the average of the seven years 1880-1886, as appears from the following table:

Years.	Average to ounce.	Years.	Average to ounce.
	Kilograms.		*Kilograms.*
1880	24. 22	1884	25. 76
1881	24. 96	1885	26 17
1882	23. 82	1886	33. 21
1883	28. 82		

Further factors which rendered the harvest profitable to the sericulturists were the diminished cost of the eggs, the home-grown eggs taking the place of the more expensive foreign article; the abundance, good quality, and low price of the mulberry leaves, and the fair price obtained for cocoons.

The following table exhibits the results of the harvests of the last seven years, with the prices obtained at Milan:

Year.	Cocoons.	Yellow.	Japanese.	Crossed.
	Kilograms.	*Francs.*	*Francs.*	*Francs.*
1880	41, 573, 189	3. 98	3. 64	....
1881	39, 564, 091	4. 03	3. 48	....
1882	31, 869, 076	4. 60	3. 90	....
1883	41, 625, 299	3. 94	3. 18	3. 64
1884	36, 464, 663	3. 98	3. 30	3. 69
1885	32, 266, 017	3. 25	2. 75	3. 00
1886	41, 397, 323	3. 75	3. 25	3. 50

From this it appears that the yield of cocoons was slightly inferior to that of 1880 and 1884.

The actual yield of the cocoons in silk was less satisfactory. The worms passed through the various stages unusually fast, on account, it is supposed, of the mulberry leaves being older than usual. The chrysalis was very heavy but surrounded with less silk. The yield in silk was also unfavorably influenced by the wet weather in the last stage of the worms, and at the time of the consignment of the cocoons.

From June on the market was stronger and more confident than for some years past. Prices, without the assistance of speculation, continued to rise slowly and steadily until November, when the rise was

Activity of the silk-conditioning houses throughout Italy for the year 1886.

City.	Number of conditioning houses.	Silk condition.	City.	Number of conditioning houses.	Silk condition.
		Kilograms.			*Kilograms.*
Milan	3	3,938,840	Brescia	1	16,380
Turin	2	718,213	Pesaro	1	10,798
Como	1	206,123	Aucona	1	9,555
Lecco	1	169,240	Messina	1	(?)1,726
Bergamo	1	143,054	Genoa	1	1,691
Udine	1	109,165			
Florence	1	96,781	Total	16	5,433,807
Lucca	1	22,776			

This total of 5,433,807 kilograms is made up of:

Kinds of silk.	Quantity.
	Kilograms.
Grèges	2,749,285
Trams	864,925
Organzines	1,668,397
Grèges doubles	91,663
Sewing-silk	59,613
Total	5,433,807

Stock of silk held at the end of each month of 1886 *at the general silk warehouses of the Milan Savings Bank.*

Month.	Italian silk.	Asiatic silk.	Cocoons.		Waste.
	Kilograms.	*Kilograms.*	*Kilograms.*	*Kilograms.*	*Kilograms.*
January	76,643	43,677	209,000	26,000	47,000
February	74,133	50,633	194,000	37,000	40,000
March	65,546	58,402	152,000	49,060	43,000
April	64,958	54,327	107,000	41,000	50,000
May	62,641	43,363	63,000	33,000	31,000
June	71,717	34,375	62,000	34,000	27,000
July	67,183	32,260	58,000	27,000	23,000
August	64,036	27,094	64,000	18,000	19,000
September	65,432	46,179	258,000	40,000	25,000
October	63,686	53,179	358,000	57,000	34,000
November	60,791	45,017	396,000	58,000	45,000
December	71,402	61,105	493,000	84,000	81,600

These warehouses, affording a convenient place of deposit for silk, and greatly facilitating commercial transactions, exercise a powerful attraction on the smaller centers of Italy as well as upon other silk-raising countries, especially in the case of cocoons, in which article Milan, the center of a great silk reeling and spinning industry, is becoming more and more the chief European market. Marseilles, previously the most important market for cocoons, is already outstripped by Milan, as is evident from the following table of the amounts held on December 31:

Year.	Milan.	Marseilles.	Year.	Milan.	Marseilles.
	Kilograms.	*Kilograms.*		*Kilograms.*	*Kilograms.*
1878	65,000	511,000	1883	170,000	262,000
1879	57,000	586,000	1884	271,000	144,000
1880	68,000	773,000	1885	231,000	75,000
1881	99,000	510,000	1886	493,000	163,000
1882	142,000	261,000			

The second half of the year was satisfactory for the carding and weaving of silk waste, an industry which is on the increase in Italy, in spite of the vigorous competition of other countries. At present it consumes about two-fifths of the product of Italy in that article, and it is not improbable that practically the whole product will ultimately be worked here.

The manufacture of silk tissues, with the exception of a few houses in Como and Milan, whose products are consumed in Italy and are beginning to find a considerable sale in France, was of little importance, as the following figures demonstrate. The silk goods imported in 1886, amounted to 525,820 kilograms as compared with 486,526 kilograms in 1885, an increased importation of some 40,000 kilograms, while the exportation was 176,990 kilograms in 1886, as compared with 174,043 in 1885.

The following table will show the range of prices during 1886 in other articles not before mentioned:

Articles.	January 1.	July 1.	December 31.
	Francs.	*Francs.*	*Francs.*
Yellow cocoons guaranteed to yield one kilogram of silk to four kilograms cocoons	13.00	12.00	13.75
Green cocoons guaranteed to yield one kilogram silk to four kilograms cocoons	12.50	11.50	13.25
Waste:			
Struse, first quality	10.25	12.50	13.50
Strazza:			
Chinese	14.25	13.25	12.50
Italian	11.75	11.25	11.50
Raw silk:			
From double cocoons	26.00	29.00	27.00
Second quality	15.00	18.00	17.00
Double cocoons	5.00	5.50	6.25
Pierced cocoons	8.50	11.00	12.00
Decayed cocoons	3.50	4.00	4.50
Recolto	2.50	2.50	3.00

In this report I have employed the denominations "kilogram" and "franc," equivalent, respectively, to about 2.2 pounds and 19.3 cents.

HENRY C. CROUCH,
Consul.

UNITED STATES CONSULATE,
Milan, March 29, 1887.

THE BANK OF SPAIN.

REPORT OF CONSUL SOHEUCH.

The rapid strides and extraordinary development of commerce and industry in Spain during the last thirty years caused the principal cities to feel the need of establishing an organized system of credit, and consequently many banking corporations were instituted under the law authorizing the issue of notes. These banks, first established in Madrid and later on in Barcelona, made loans, discounted paper, and other similar operations; but their sphere was limited and there was little stimulus for their own development or the benefit of the public in general.

Notwithstanding, the Bank of Castile and the Bank of Barcelona acquired great credit and brilliant success. The increasing needs of commerce and industry, however, gave rise in Barcelona, Madrid, Cadiz, Malaga, Seville, and other towns to a great number of similar institutions, which, by means of the issue of circulating notes, competed with the above-mentioned banks in the facility of furnishing capital for business purposes. The privilege was abused, and this abuse produced a crisis which, in year 1868, placed the greater number of these institutions in the most precarious condition and obliged them to wind up their business.

A law was enacted suppressing the issue and circulation of notes by private banks and creating the Bank of Spain, to which was granted the exclusive power of issuing notes for circulation.

The Bank of Spain, though governed by severe statutes and subjected to the supervision and intervention of the Government officers, is not a state institution, neither are its notes legal tender, nor have they the guarantee of the nation. The public at large have not, however, very clear ideas on this point, the greater part having vague opinions to the contrary, owing to the official nature of the bank, the governors or head officers of which are named by the Government. This and the intimate connection of the bank with the treasury and financial departments of the Government have given rise to the idea of the bank being a national institution, similar to the Bank of England and Bank of France.

In the beginning, when the bank was first established, the public were rather wary and prejudiced against its notes in circulation, but a long series of prosperous years has strengthened its credit, and at the present time its notes circulate throughout the nation and have never been at a discount, excepting on some very rare occasions, in times of political panic, during which the heavy run on the bank obliged it to adopt regularity in its payments, the holders of notes having thus to take each one his turn, assigned on application.

The returns to the shareholders have been constantly on the increase and the rise in the price of the shares has been proportionate. This result has been due to the opportunities the bank has had to carry out all sorts of financial operations on a large scale both with the Government and in the general market.

The credit of the bank and the profits of its shareholders rose to a high degree after the law granting it the monopoly of the issue of notes as currency. The issue of other banks, owing to the natural needs of commerce, had become very large, especially in the capital cities of the several provinces, and in many cases had given rise to heavy abuses, causing serious alarm whenever the country underwent any political commotion, unhappily an important feature in the history of its political and social development.

The bank's credit and solidity suffered but little from the competition that arose on all sides in 1881, when, on account of a temporary prosperity in general business, a great many stock companies were organized. In the desperate struggle for financial existence that ensued, the great majority of these companies, established on a fictitious basis, collapsed; while the Bank of Spain, extending the circle of its operations and establishing more liberal conditions in its dealings—at the same time affording the public at large greater business facilities—remained almost absolute master of the situation.

The bank's circular, dated at Madrid on January 1, 1884, gives a clear idea of its organization and the advantages the country derives from an institution managed intelligently and with absolute formality and whose soundness after many years of proof, in the midst of great national trials and convulsions, is established beyond all doubt.

The circular referred to contains the following points:

The shareholders of the bank may have their shares registered in Madrid or at the branch offices and transfer them at will from one office to another.

The shares registered at the branch offices are transferable from one holder to another the same as at the main office.

The dividends accruing to shares are payable at the office in which they are registered, or at any other, at the will of the holder.

The dividends, if so desired, may be credited to any person that the holder may designate.

The bank discounts drafts and promissory notes payable within ninety days, when drawn up with all the legal requirements and having the indorsement of at least two persons of undoubted responsibility, one of whom is inscribed in the bank's lists of credit, which are re-formed annually.

Firms of one or more members and stock companies not inscribed in the bank's lists of credit that wish to have their signatures admitted in the discount of notes and bills by the bank, can request it with the necessary proofs of their sound business standing and solvent condition.

The lists of credit are strictly private.

The bank accepts or refuses the paper presented for discount without giving any explanation of its determination.

Although indorsed by responsible persons, the bank refuses to discount the following notes and bills: All those drawn up in a different form from that prescribed by law; notes or bills with blank indorsements, without date or in different form from that required legally for the transfer of the proprietorship of the note; those which may give rise to any suspicion of fraud.

The paper to be discounted, whether composed of one or more notes or bills, must be presented by invoice, the form for which is given by the bank, and must state the name and residence of the firm asking for the discount; the face value of each note separately; the names and residences of drawer, drawee, and indorsers; the maturity of each note separately.

Paper discounted by the bank must be indorsed to it by the holder, who then receives an order for payment by the cashier.

The bank likewise discounts coupons of the national debt, whether redeemable or perpetual, internal or exterior, and also bonds already called in.

The coupons and called bonds must be presented to the cashier, who gives a receipt, which is in turn exchanged at the proper department for an order of payment by the cashier.

The bank grants loans to reliable persons on bonds of the national debt or of the public treasury up to 80 per cent. of the market value of same, according to the official quotation, for terms from ten to ninety days and for sums not less than $100.

The borrower must make out his petition on the blank forms furnished by the bank, stating name, residence, security, amount to be borrowed, and term.

If the loan be granted the transaction must be completed by the borrower's presenting an invoice stating the class and number of securities, which is presented to the cashier. Likewise he must sign a duplicate policy, one copy of which is kept by the bank and the other by the borrower. This policy, which is authorized by a broker of the Madrid Exchange, or by a commercial broker if the loan be made by a branch office, states in full the whole transaction.

After depositing the securities and signing the policy, which must be countersigned by the subdirector at Madrid or by the director at the branch offices, the borrower receives an order for payment of the quantity asked for, less the interest agreed upon.

If forty-eight hours transpire after the grant of the loan has been notified to the borrower and the transaction is not completed, the grant is canceled.

The securities for the loan are considered as transferred to the bank without any other requisite but the mere fact of having been delivered for this object.

Should the securities depreciate before maturity of the loan, the borrower is obliged to increase the value deposited in a corresponding amount.

Should the borrower fail to redeem his pledge at maturity or increase the security if necessary, a request to this effect will be made to him in writing. Should he at the expiration of three days after this request still fail to fulfill his engagement, the bank is at liberty even without judicial warrant to sell the security deposited through an exchange or a commercial broker or in any other manner, official or extra-official, sanctioned by the established customs of each place.

If the proceeds of the sale of the security should not cover the amount of the loan, with interest and costs, the bank will sue the debtor for the difference, and if on the contrary they are greater, the bank will deliver the excess to the borrower.

The bank opens credits on public values up to 80 per cent. of their market price.

Requests for credits must be made out on forms similar to those used in requesting loans and furnished by the bank.

When the credit is granted the securities are deposited with the cashier and a duplicate policy made out and signed with the same formalities as in loans. This deposit must be made within three days after notice of the grant of the credit.

When these requirements are fulfilled the credit is considered open and a checkbook given to the holder of the credit.

The holder of the credit may return the amounts taken up on account in whole or in part, the same as with ordinary deposits on demand, a receipt being given for each deposit.

One-eighth of 1 per cent. is charged as commission on the amount of the credit, whether made use of or not.

The bank keeps an account for each credit with mutual interest—interest being charged for the number of days on the amounts taken up and credited for the sums returned. The interest is the same as that charged for loans.

The credits are settled every four months, and the person or firm using the credit must pay the balance due the bank. If failing to do so, the bank orders the sale of the securities in the same manner as mentioned in the case of loans.

The credit once settled, it can be renewed if the bank so chooses and the holder desires it. In this case the balance remaining at the previous settlement is set down as first sum. The renewal, however, must be asked for by the holder, and the transaction is noted down in the original policy.

The commission and interests earned by the credit are charged at time of settlement or before if the holder desires to close the credit.

The interest for each sum deposited or paid out is counted from the same day of such deposit or payment.

The same rules as to property of the securities deposited, and as to method of recovery of amounts delivered at the expiration of the term of credit that have been explained in the case of loans, hold good for credits.

The bank gives drafts payable at its branch offices or by its agents at moderate rates of exchange for sums not less than $50.

The branch offices also draw on the central office, and on one another in the same conditions.

The bank has already established branch offices in the following cities: Alicante, Badajoz, Barcelona, Bilboa, Cadiz, Cordova, Corunna, Granada, Jerez, Malaga, Oviedo, Palma in Majorca, Pampeluna, Reus, St. Sebastian, Santander, Seville, Tarragona, Valencia, Valadolid, Vitoria, and Saragossa; and agents in Albacete, Almeria, Avila, Burgos, Caceres, Castellon, Ciudad Real, Cuenca, Gerona, Guadalaxara, Huelva, Huesca, Jaen, Leon, Lerida, Logroño, Lugo, Murcia, Orense, Palencia, Pontevedra, Salamanca, Segovia, Soria, Teruel, Toledo, and Zamora.

The rate of exchange between one office and another is fifteen hundredths of 1 per cent.

The bank draws on its agents for the amounts it desires to dispose of at the rates of exchange which are posted daily in the secretary's office.

The central bank and its branches take sound commercial paper on towns in which there are other branch offices at rates of exchange posted daily, as before said.

The bank and its branch offices open accounts to persons, firms, or companies that desire it. The request must be made out on forms furnished by the offices and must state residence, business, or profession, name of firm or company, and names of directors.

On opening an account the person or persons authorized to draw on the bank leave their signature in the register for recognition.

The bank refuses to open accounts to declared bankrupts, to persons without recognized property, and to those declared insolvent by judicial sentence, unless legally reinstated.

The bank credits to depositors sums paid in its notes, in gold or silver coin, or paper payable within ten days.

The first deposit must not be less than $500 in Madrid or $100 at the branch offices, and each following deposit not less than $50.

An invoice stating the amount in writing must be made out at each deposit and signed by the depositor or his authorized representative.

The necessary account and check books are furnished to depositors. The checks are payable to bearer. The bank also furnishes check-books for transfer of sums from one office to another in favor of persons having an open account at the office to which the transfer is made.

The depositors may draw on the bank up to the total amount deposited. The amount thus considered are the sums collected. Drafts and notes cannot be disposed of till after collection; those not collected will be returned to the owners in time for protest.

Checks must be signed by those in whose name the accounts are kept open, if private individuals, or by the authorized representatives of firms, companies, or corporations. Individuals may also authorize others to sign for them either by power of attorney or by written communication to the directors of the bank or branch office. In all cases those authorized to sign for others must leave their signature at the register for recognition.

Checks should be for sums not less than $25, except for balance of account.

The amounts for which the checks are drawn must be stated both in writing and ciphers.

The bank is not responsible for any loss occurring on account of the loss or theft of checks or check-books, but it will stop payment of a check when not already made if the drawer notifies it to do so, until it is legally decided to whom it should be paid, the amount being kept meanwhile in deposit.

The bank closes the accounts of those overdrawing their balances and refuses to reopen them.

The bank refuses all information to third persons respecting funds deposited, unless so ordered by legal mandate.

Accounts will be closed when those for whom they are kept request it, or when, the balance being lower than $20, six months transpire without further deposits.

The bank detains all persons handing in illegitimate checks, when so proved.

Persons or companies having credits at the bank or its branch offices may dispose the transfer of sums from one place to another where the bank has an office, in favor of other persons with accounts open at the place to which the transfer is made.

Persons, firms, or companies desiring to make a transfer send a check to this effect to the office in which their account is kept, stating clearly in writing and ciphers the amount to be transferred, the office to which the transfer is made, and the name of the person, firm, or company having an open account at the latter office to whom the amount transferred is to be credited.

The transfer checks before being admitted are compared with the original stubs to certify their legitimacy. This done, and the credit of the drawer seen not to be overdrawn, a receipt is given for the amount transferred made out in favor of the person to whom the transfer is ordered, although the latter is not obliged to present this receipt to draw on the amount transferred and credited to him.

Individuals having open accounts at the bank or its branch offices and who reside outside the town in which the office is located, or who happen to be absent from the said town, may remit drafts or notes to be credited to their account after collection. These remittances must be duly invoiced, stating the names and residences of the drawees; and when more than one draft or note is to be collected, the amounts becoming due at the same date, which must not be beyond a term of ten days, should be grouped together.

The notes and bills to be collected must fulfill all legal conditions and be indorsed to the bank or branch office where the drawer or indorser's account is kept.

The bank or branch office performs all the duties requisite for the collection of the amounts thus remitted, such as presentation for acceptance and payment or protestation in case of failure to accept or pay, charging to the drawer's or indorser's account the expenses for same in the latter case. In case of protest, the bank notifies this fact by the first mail to the drawer or indorser.

Should the balance standing to the credit of the drawer or indorser be insufficient to cover the expenses in case of protest, the bank, on notifying the protest, requests said drawer or indorser to cover the difference. The bank reserves to itself the right to close the accounts of persons who make frequent remittances that require protest.

The holder of an account may draw on his credit by an ordinary commercial draft, but he must notify the bank of this draft, stating number, amount, name, and residence of payee, and term. This letter of advice is sufficient for the bank to debit the amount drawn to the drawer though the draft be not presented.

The holders of accounts may also make payable at the bank drafts drawn against them if they so state it on the drafts on accepting them; and at the same time notify the bank of the fact, which notification, as in the former case, is considered sufficient for the debiting of the amount to the account of the drawee.

Persons, firms, or companies residing outside of the legal residence of the bank or branch office where their accounts are kept may make use of payment and transfer checks the same as the residents in the town where the office is located.

Share or bond holders having their values deposited at the bank or its branches may request the bank or office to credit to any other person, firm, or company also having an open account amounts accruing from dividends or coupons of said values. This request must be made out on a blank form, furnished by the bank, accompanying the register of shares and the receipt of deposit, which are returned after stamping on them the fact of crediting the aforesaid dividends to a third party.

No receipt need be given for this operation. Holders of extracts of inscription of shares and of deposit receipts know that the dividends and interests of shares and bonds are credited to the assigned accounts from the date they are made payable.

When an order has been given to credit accounts with dividends or interests accruing from shares or bonds deposited at the bank, a counter-order may be given at any time; but the extracts of inscription or the deposit receipts must be presented to have the new order stamped on them.

Any person acquiring, through indorsement or other means, the property of values deposited at the bank should see that the receipts for same bear no mark indicating that the dividends or interests accruing to them are made payable to third persons. As the bank keeps no register of indorsements, when the receipts bear the aforesaid indications the owners will find it convenient to take up the deposit and renew it in their own name, or give a counter-order, canceling that of payment to third persons.

The bank keeps special current accounts in public values, the same as for money on demand.

The accounts will be opened in the name of known persons, who must sign the first invoice of values delivered, and besides have their signature at the register for recognition.

Each account must refer to one class of values, although several accounts of different classes of values will be kept in the name of one and the same person.

Holders of current accounts of this kind may draw on the values thus deposited by means of checks with double stubs, stating the series and numbers of the titles to be delivered.

Coupons of values thus deposited will be cut and collected on specified days, except when the owners notify their express desire to leave them uncut; and all new deposits must have the same coupons and no more than those already deposited.

A moderate commission is charged for the keeping of these accounts, viz, $\frac{1}{4}$ per cent. a year on the interest of values that yield it; $\frac{1}{200}$ per cent. on values that do not draw interest.

This commission is charged half-yearly, deducting the amount from the interests or dividends collected on those values having the same payable half-yearly or quarterly, and annually when the interests or dividends are so payable.

The bank accepts deposits of coin or notes on trust, whether voluntary, obligatory, or judicial. Voluntary deposits are transferable or not. All these conditions are noted on the receipt given for the deposit.

The deposits must be accompanied by an invoice signed by the depositary, who must also leave his signature on the register for recognition.

No voluntary deposit under $50 is admitted, nor any that are not multiples of 5; but several receipts will be given, if so desired, to one and the same person when not under $50 each.

A deposit on trust can only be taken up in entirety. Nothing is charged for safe-keeping on trust deposits in coin.

The bank also accepts voluntary obligatory or judicial deposits on trust of public values.

Under this denomination are comprised national and treasury bonds, shares and bonds of legal corporations, listed at the exchange, and similar values of foreign countries.

Voluntary deposits are made transferable or not, at the will of the depositor, for which receipts are given.

These deposits are made under double invoice, stating the name of the depositor; whether they are transferable or not; the class of values deposited; their numeration, beginning with the lowest, and their nominal value. This invoice is signed by the depositor, whether the deposit is in his own name or in another's.

A separate invoice must be made for each class of values, and also for values of the same class when the numbers cannot be clearly stated.

The bank gives temporary receipts at the time of deposit, which are exchanged on the following day for definite ones.

The bank has the legitimacy of the values certified to by the issuing offices, and notes down this certification on one of the invoices.

Deposit receipts may be transferred by indorsement from one person to another.

The bank delivers up the deposit the following day after being so requested, and after the premium for safe-keeping has been collected.

In case of loss or burning of any deposit receipt a duplicate will be given, after advertising the fact three times in an official newspaper at intervals of ten days, and after two months have elapsed from the publication of the first advertisement, without any third person putting in a claim, in which case all responsibility for the bank ceases.

Deposits are returned only after the legitimacy of the receipt is proved, as likewise that of the signature and of the indorsements, if any.

The last holder of a receipt must sign it, stating having received the values for which it was given.

Representatives of holders of deposits may take them up by showing their lawful authority for doing so.

Should the holder of a deposit receipt die, the values will be given up to his lawful heirs, who will have to show a certificate of his death and a legalized copy of the testamentary clause by which they are named heirs, or of the judge's decision declaring them such, when the former holder dies intestate.

The bank collects the interest due on bonds of the national debt, the public treasury, or of private corporations, when payable at the place of deposit. The coupons are cut from the bonds forty-five days before payable, and no deposits are accepted having previous coupons attached, or even the current one, if within forty-five days of payment.

Coupons will be given up in full at any time by the bank to the depositor if so requested when more than forty-five days are intervening before payment.

When a deposit is requested to be returned, after the coupon to be collected has been cut off, the bank gives a receipt for the coupon payable after collection.

Shares or bonds not having coupons and which have to be presented integral for the collection of dividends or interests cannot be given up by the bank until they have been returned to it.

Proceeds from values on deposit will be paid to the holders of receipt, unless a judicial decision is pending, or they may be credited to any one having an open account at the bank or any of its branch offices.

For values to bearer, one-half of one per cent. on the interest collected is charged for safeguard per year.

For values not drawing interest, one two-hundredth per cent. of the nominal capital is charged.

For registered values, one-half of the above amounts.

The minimum amount charged for safe-keeping is $0.05.

The premium for safe-keeping is due from the day of deposit to the day it is taken up, fractions of a year being counted by months and the last month will be counted as a whole one if more than fifteen days have elapsed, and as half a month if less.

Dues are collected on returning the deposit.

Certificates of register of the bank's own shares are accepted on deposit without charging any dues.

The bank collects the value of those bonds called in for redemption which are on deposit, no steps being necessary to be taken by the owners.

If while bonds have been deposited with the bank, any should be redeemed, on returning the deposit, the amount collected from redemption is given instead of the bond itself.

The bank transfers from one office to another values deposited, at the request of the owner, on his account and at his risk. This transfer is made through the mails fulfilling all the conditions established by the postal laws regulating this class of transaction.

When such a transfer is ordered, the owner of values deposited signs a receipt in full of same, pays the premium for safe-keeping up to date, and likewise the cost of transfer. In return, a provisional receipt will be given, exchangeable for a definite one after arrival of the values at the office to which they have been ordered to be transferred.

The bank also receives valuables and jewelry on deposit, which must be placed in cases, of which a double invoice has to be presented stating the value of the contents. The cases must bear distinct marks and inscriptions, and have strong bands when the size or weight requires them.

After comparing the contents with the invoice, the cases containing the valuables are closed by the depositor and bound and marked with both his and the bank's seal. A provisional receipt will be given on the day of deposit, to be exchanged on the following one for a definite receipt.

No deposit will be accepted of more than one case at a time, nor of any case whose declared value exceeds $15,000.

The bank only undertakes to retain the deposit in the same state in which it has been made, and is not responsible for the value assigned to it, nor for any deterioration owing to the nature of the valuables deposited, time elapsed, atmospherical changes, or any other cause not directly dependent on man's intervention.

The bank charges for these deposits one-twentieth of 1 per cent. on the declared value, quarterly, during the first year of deposit, and one-tenth of 1 per cent. quarterly every succeeding year.

The bank and its branch offices will collect private drafts payable at home and abroad, but does not cash them until advised of their payment. It will also negotiate deposit receipts or checks.

The branch offices also undertake to collect coupons of the public debt payable at Madrid, sending them by mail with the conditions established by the postal authorities on account and at the risk of the owner, charging a moderate discount for commission and exchange.

Collection of interest and proceeds from redemption of national bonds that the bank is encharged to pay may be made at any of the bank's offices without commission, bonds deposited at the branch offices having the same advantages as those deposited at the bank in Madrid.

FRED'K H. SCHEUCH,
Consul.

UNITED STATES CONSULATE,
Barcelona, Spain.

DANISH DAIRY PRODUCTS IN ENGLISH MARKETS.

REPORT OF CONSUL RYDER.

Thanks to the great rapidity of communication, combined with the low cost of transport, distant producing countries are enabled to compete successfully with the home produce in the supplies of all description of agricultural products.

Thus, as regards milk. Whilst the great capitals and larger cities in former times were chiefly supplied from cows stalled on the spot, or in the immediate neighborhood, this is now totally changed. Paris, for example, is receiving her daily supplies of this article from Switzerland; whilst London is furnished with the needful daily requirement for her dense population from the remotest parts of the Kingdom. Holland, it is said, has even commenced to take part in this traffic, although it would appear to be very doubtful if such movement is being attended with success, as the Dutch milk will scarcely find favor in the London market, where the milk of the present day is unquestionably of very superior quality. Here in this country it is felt among the dairy proprietors that although they might with all confidence be fully able to satisfy the demands of the London consumers as regards quality, the cost and risk attending the long sea voyage would be too great to admit of remunerative results. The milk during the voyage would have to be kept down to 10° or even 8° C., in order to prevent the formation of butter, or souring, and it would be of little use to think of employing antiseptic means to counteract these dangers, as the London milk-dealers would, without doubt, use all their influence to have such milk declared by the milk inspectors adulterated.

Cream, which brings enormously high prices in London, might be better able to support such expenses of transport; but as it can now only be viewed in the light of an article of luxury in London, and is only used to a limited extent, it cannot be looked upon as an export article of any material consequence.

As regards cheese, of which there is consumed in England a very large quantity and mostly of very good quality, the Stilton and Gorgonzola cheeses stand notably highest in price. Of American cheeses, very considerable quantities are sent to the English markets; whilst the Danish poorer dairy cheeses are found to be quite unsalable. Moreover the foreign cheese product sent to England is sold at extraordinarily low prices. Under these circumstances it is felt here that the skimmed milk can, without question, be more profitably employed in feeding calves and young pigs. As regards, however, the trade in calves, the Danish commission agents in England report it as but poor. Whilst calves of two to three months old, when in good fattened condition, can be disposed of, those, on the other hand, of the age of five to six months are stated to be almost unsalable.

The prohibition against the introduction of live swine into England from this country has led to the erection of a large number of hog-slaughtering establishments all over this Kingdom, from which a considerable export of bacon is now carried on, but of which, unfortunately, the greatest part first passes through the intermediate hands of Hamburg dealers. It is also matter of complaint that the Danish swine are in great part too highly fattened and not sufficiently fleshy, and that it would be more advisable if the animals were slaughtered at the age of three to five months, rather than that of five to seven months.

Next as regards butter, by far the most important dairy branch in this country. The present mode of carrying on the trade in this article is of the following nature: In the very first days of the week the butter is forwarded by the dairy proprietors to the different export merchants, who collect the same, and by these it is again dispatched towards the close of the week by the cattle steamers to England, arriving in London on the Friday afternoon, so as to be in time to come into the Saturday market of that city; whilst its arrival on the markets of the north of England and Scotland first takes place on the Monday of the following week. The Danish butter will thus, on its arrival in London, be about eight to nine days old from the time of its leaving the dairy, and on the northern markets of still older date; and whilst passing through the different hands of the provision merchants, the grocers, and small dealers, a period of fourteen to thirty days may fairly be said to elapse before it reaches the consumer, and for such length of time it is absolutely necessary that the butter should remain in perfectly good keeping condition.

Under the present conditions, that which is now demanded of butter, so that it can command a high price, is that it should be of very fine quality and of good keeping properties, and, so far as concerns the fineness of quality, it will be necessary that producers should regulate themselves according to the taste and demands of the English consumers. The most exacting of the consumers require that the butter should have the taste of sweet cream, and that it shall be carefully washed out and unsalted, like the French butter. As this description of butter is, however, confined to a more limited class of the English community, the producers are recommended to use due caution against exposing themselves to the risk of an overproduction of such an article, as it must be borne in mind that this fresh, unsalted butter is now even sent from Italy to the London market, and that it is only a minor portion thereof that can be said to command the desired top prices. The great drawback to this unsalted butter consists mainly in the difficulty of its being kept in perfectly sweet and fresh condition, as well as the losses which may have to be submitted to on all such occasions when a speedy sale from one cause or another may be impossible.

The English dairy companies would appear to lay themselves out more in the production of a slightly salted butter, so called Dorset butter. Herein lies a hint to the producers in this Kingdom as to the class of butter to which their attention might be most profitably directed. The great masses of the English public may be said to be fully satisfied with the quality of the butter sent from this country; and it must always be remembered that it is not in the upper circles that the many customers are to be found; but, on the other hand, it is amongst the great middle classes as well as the working classes, and that a very large amount of Danish butter is at present consumed by the great factories and mining population.

With such an extensive range of customers, a sale can easily be found for the whole of the butter exports from the Kingdom; and it is certainly far safer to build an export trade upon the wants of the great masses than on the limited circle of the wealthy classes. Complaints, unfortunately, are at times heard from England that the butter from this country is somewhat too strongly salted; but on the whole it is not advised to make any alteration in this respect, as the great mass of the customers seem to be quite satisfied with it as it is. It is, however, strongly impressed upon all dairy proprietors that the greatest attention and care should be devoted in the making of the butter, both as regards the kneading and salting, as well as in the laying down in the casks, so that it may be as far as possible of one uniform character.

Too frequently the malpractice is to be observed in a defective washing. The water should be entirely removed; as otherwise the butter will be wanting in proper consistency.

These remarks would seem to be specially directed towards the managers of the Union dairies; more especially in reference to their winter product, and in consequence of which drawbacks their articles seldom obtain the highest prices; and as these Union dairies are of immense advantage to the large number of peasant proprietors in this Kingdom (some 70,000 in number), it may be said to be of national importance that the product of these Union dairies should be more strictly attended to from beginning to the end.

In respect to a more frequent communication with the English markets, it is the opinion here that so far as the northern ports and those of Scotland are concerned, no great benefit would be derived thereby, but that on the other hand for the London market, where their competitors have almost daily communication, it would certainly be very desirable if more frequent intercourse could be established.

Again, it has been proposed that the butter should be packed in casks of smaller size than the present, so that it might be sent in many cases direct from the producer to the consumer; but it would, nevertheless, appear to be more generally held that the present drittle cask, in point of view of cheapness, convenience, and handling, and for good preservation of the butter, is absolutely the most suitable mode of packing; and when Italy has adopted a similar style of package, this is undoubtedly to be attributed to its good points rather than to the desire on the part of the exporters from that country of imitating the Danish form of cask. It is, however, strongly recommended that these casks should, as much as possible, be of one uniform size, and not containing more than 100 pounds, English weight. Whilst the Danish exports of butter to England have been steadily on the increase in the latter years, those from France have been meeting with a decline; but, unfortunately, it cannot be concealed that the exports from Holland and other countries of the article of butterine to the English markets have of late years been steadily and largely increasing; and it is from this export branch that the Danish butter trade is most dangerously threatened.

The Dutch butterine, partly unmixed or in part mixed with butter, is now imported into England in packages of all possible descriptions, in boxes, in baskets, in ordinary casks, and in drittlers, the latter being in perfect resemblance to the Danish casks, and stamped even with marks similar to those of dairies in this country. It is true that the butterine is passed through the English custom-houses under its true denomination; but it is nevertheless much to be feared that when coming into the hands of the small retail dealers it is too often passed off amongst their customers as butter, and the objects of the Danish marks on the casks is only too palpable. The remedy against this crying evil can only be looked for in a more careful and more stringent mode of inspection on the part of the English officials to defeat this disastrous traffic.

Butterine, it cannot be denied, as before said, is the enemy most to be dreaded by the dairy proprietors.

The finest description of butter will unquestionably always meet with a ready sale; but the danger lies in the article of more or less inferior quality, and it cannot therefore be too strongly impressed upon all butter producers that the butter made from milk where the cows have been abundantly foddered with swedes or turnips can never be expected to obtain the highest prices; and with the dreaded competition from butterine, together with the very keen competition which has to be encountered in the English markets from their Irish and other numerous competitors, it will become absolutely necessary to strain every nerve towards the production of a first-class article if the Danish dairy classes do not wish to succumb to the competition of these two dangerous opponents. It cannot, either, be too forcibly brought to the remembrance of all connected with the dairy business that whilst the manufacture of butterine is year by year being largely on the increase, the quality of this article is likewise at the same time steadily being brought to greater perfection, and that its competition with the lower grades of butter will, as a natural consequence, with each succeeding year become a struggle of greater intensity.

HENRY B. RYDER,
Consul.

UNITED STATES CONSULATE,
Copenhagen, September 30, 1886.

IS DANISH BUTTER DETERIORATING?

REPORT OF CONSUL RYDER.

It may be as well to observe, in the first place, that it was first in the years 1870–'78 that the great development in the butter exports from this country can be dated, and that it was likewise at that period that this butter had obtained its high repute on the foreign and more especially in the English markets. It was then a constant theme in the correspondence of the English provision traders to their constituents in this Kingdom that Danish butter was the best in the world, and that it was greatly sought after in all the English markets owing to its vast superiority over any of its competitors. The dairy farmers here still try to flatter themselves that they are yet maintaining this position of superiority over all their rivals, and spite of complaints, which are becoming more and more frequent, that the quality of their butter is no longer of the same high standard as formerly, they seem scarcely inclined to pay sufficient attention to these remarks. In the mean time it would appear that these complaints are day by day more accentuated, and the opinion is constantly expressed that this butter has receded several degrees in quality during the last seven years.

From those exporters and experts in the trade to whom the question has been addressed, whether such falling off in the quality has really taken place, and whether any evidence can be adduced in support of these views, it has been answered that it is not an easy matter, but rather one of extreme difficulty, to bring forward any decisive proofs of the correctness of these assertions; but nevertheless it would seem to be the general opinion of these experts that Danish butter can no longer be said to maintain its former lead in the foreign markets, and that the sales are attended with more difficulty than in former years. It is at the same time remarked with much justice that too great attention should not be paid to the low prices which have been the rule of late in the butter market, for whilst all other produce has in recent times had to submit to a decline of several per cent., it could not otherwise than be expected that the turn would also come to the butter markets.

By the exporters it is held that of the exports in the present day from this country no more than 20 per cent. thereof can be fairly entitled to rank under the standard of very finest and faultless class of butter, and that it is not even of unusual occurrence for some of the casks of the most renowned brands from the large estates to be rejected on arrival by their English customers as not coming up to the stipulated requirements, which was a thing almost unheard of in former years, and that the purchases on the spot by English traders may be said to be confined to this fractional amount of the exports, whilst the remaining 80 per cent. have now to be shipped on consignment at the risk and cost of the Danish shippers.

Whilst these exporters and all who are intimately acquainted with the trade are ready to admit that Danish butter still holds its prominent position in the English markets, this praise, they add, must, however, be confined to the before-mentioned fractional part thereof, and that how far this may exceed or be below the stated 20 per cent. it is difficult to say, and these views are strongly corroborated by the published reports of the different exhibitions of dairy produce which have been held throughout the Kingdom in the latter years.

These reports are in no way in contradiction of the opinions held by the exporters and those acquainted with the trade when they say that only one-fifth of the Danish butter can at the present time be considered as being of very finest quality, inasmuch as by the decision of their own judges premiums for butter of very finest quality were only awarded to one-fifth of the exhibited brands; and at a large butter show lately held in the town of Kjöge the results were almost the same, premiums having only been awarded to 43 out of a number of 239 exhibits, and that here, as at other shows, the premiums were mainly awarded to the butter sent from the large manorial estates, whilst the medium sized dairy farms, both with regard to the relatively larger or smaller producers, were left far behind in respect to the quality of their products.

It seems to be the concurrent opinion of all that the two leading factors in connection with this retrograde movement may be sought for under the following heads:

First, in the course pursued in the foddering of the cows.

It is well known that when in the seventh decade of this century every exertion was made to promote the improvement in the quality of the butter it was strongly impressed upon all dairy farmers that a good and appropriate feeding of the cows should consist of wheat bran and oats, together with a limited supply of rape-seed cake, as being the indispensable constituent fodder admixture for the production of good milk, and that all other descriptions of strong food should only be used with great care in a subordinate degree; also, that as regards roots, carrots and mangolds might be used in limited quantities, together with an ample supply of strong fodder and hay; but that swedes and turnips, as being the means of imparting a pervading bad taste to the butter, should be considered as constituting highly objectionable fodder materials for milch cows. It is true that at the present time both oats and rape-seed cake as well as a certain amount of bran are still used; but when attention is drawn to the trade now carried on with various kinds of feeding stuffs in all the districts, it is at once noticeable how largely the sale of bran has decreased, whilst on the other hand the sale of other modern fodder materials, such as earth-nut cakes, cotton seed cakes, turnsol seed cakes, &c., has been on the increase. Whilst fully admitting that these rich oil cakes can be bought by the dairy farmers at less cost than the bran, the question is plainly put before them of the influence exercised by these feeding stuffs on the quality of the butter, and it is feared that it cannot be denied that it has been too generally the custom to depart from the most successful and best of all feeding stuffs to replace them with others of more doubtful value, and so far as turnsol-seed cakes are concerned, certainly with one of more injurious tendency. To this it may also be added that in parts of Jutland it would appear a general feeling of confidence has of late been placed in the use of turnips as feeding material for their cows; thus, whilst for ten years back this was considered as the most pernicious of feeding stuffs in connection with the quality of the butter, it is now too generally advocated as affording good milk fodder.

Even in the agricultural journals articles are frequently to be met with strongly recommending a liberal use of turnips (1 to 2 bushels per cow daily) as being an economical as well as lucrative fodder for the cows, and it is at the same time maintained that such liberal supply of turnips places no obstacles in the way for producing the finest quality of butter; but that it will always be advisable to put a suitable amount of saltpeter into the milk or cream to neutralize and remove any bad taste that might be caused through the use of the turnips. This seems plainly to indicate that in the latter years too great weight has been placed upon obtaining an increased production, whilst a less careful attention has been devoted to an appropriate course of foddering, in connection with the desired quality.

Regarded in a purely economical point of view, no one attempts to dispute that it is possible to produce a larger yield and at less cost with the aid of turnips as main article of fodder in comparison with other feeding stuffs; but when it is asked what influence the various feeding admixtures have had upon the quality of the butter, so surely will turnips and saltpeter not be considered as having constituted one of the agencies that have conduced to the fineness and reputation of the butter produce.

Turnips, it is further admitted, have frequently been given in large quantities in the autumn, when the cows are removed from the fields during the first weeks of their being brought into their winter stalls, when it is an object at as low cost as possible to guard the cows against a too great falling off in milk during the change from grass to winter fodder, and it follows to reason that this course of foddering will yield a large amount of milk; but, notwithstanding that a suitable quantum of saltpeter was put into the milk, it was never acknowledged by competent judges that the butter could be denominated as fine quality, and all the attempts that have been made from time to time to make use of turnips as the chief constituent part of the cow's winter fodder has always, after the lapse of a few weeks, ended with disastrous results; so that it was found most expedient to discontinue all turnip fodderings to the milch cows and rest contented with mangolds and carrots, although these, as a general rule, will not produce anything like the same amount of butter as can be obtained with turnips, and judging from all experience it may with safety be said that turnips and saltpeter can be set down as one of the main factors in lowering the previously high reputation of Danish butter.

Secondly, to a greater laxity in the care and attention so constantly called for in all dairy operations.

Here as well as in the relaxed care paid to the foddering of the cows just as little praise can be awarded on this score for any earnest attention in the carrying on of the work so as to secure the requisite training to give assurance of proper preparing of the butter, and again it must be noticed that whereas in the seventh decade of this century it was generally admitted that although on the large as well as small dairy farms, whilst following their old customs and practices, they might be able to make good butter for their own use, they were, nevertheless, entire strangers to those new and improved modes of procedure which have to be pursued when fine butter has to be made for sale. and when in these sales have to be looked to as a main source of income.

It was at that time deemed absolutely necessary that such modes of procedure should be carefully taught, and in furtherance of these views well-trained assistant instructors were kept in constant activity in going from dairy to dairy, where an eager desire was felt for guidance and instruction, and their labors were so well carried out that a full knowledge and practice in the modes of preparing the finest class of butter was widely spread throughout the land. But it has been the greatest mistake to imagine that this knowledge once acquired could be kept up without fresh nourishment and support. Even the most capable dairy helps, who have been educated and brought up to the work, will become lax in their work after a time and by degrees contract objectionable habits unless they can occasionally look around and obtain fresh ideas from others conversant with the business and thereby be in the position to become acquainted with such new and improved methods as may be taking place outside of their own circle.

Such instructions unfortunately are no longer so eagerly sought after in these days. One and all seem to consider that they are sufficiently educated and skilled in their work, and the result of this apathy and self-conceit is to be seen whenever this previous active agency has been discontinued; and it may be added that the large dairy proprietors have not either shown a good example in this respect. In former days also the Agricultural Society took an active part in promoting the practical education of the dairy helps; and, in conjunction with their exertions, a private dairy school was established in the island of Zealand, which has been the means of sending out into the world a number of well-taught and efficient dairy people, and it must always be a matter of regret that the Agricultural Society were influenced in the discontinuance of their work of practical education, on the grounds that this private work was of such extensive character that their interference was no longer called for. The private educational work is without doubt of very comprehensive nature, but it is scarcely of that solid and thoroughgoing description as might be desired; and the discontinuance of the Agricultural Society is much to be regretted.

From this private seminary many well-taught dairy helps are sent year by year from Denmark to assist in dairy work in Sweden, Finland, and other parts of Russia; and it would be strange if this exodus of such good materials should not also have made itself felt in the productions of this country.

I am at the same time of the opinion that a third factor might have been brought forward as having materially contributed to this deterioration in the quality of the butter. I would allude to the large number of Union dairies which have been established in the latter years all over the country, to which, as I mentioned in previous dispatches, the great development in the butter exports have been in large measure due, whilst at the same time, from the numerous difficulties which these dairies have to contend with, it is universally acknowledged that the produce from their works has never been classed under the standard of finest and faultless butter, but rather the reverse.

HENRY B. RYDER,
Consul.

UNITED STATES CONSULATE,
Copenhagen, November 9, 1886.

ACQUIRING LAND IN SUMATRA.

REPORT OF CONSUL ECKSTEIN.

Application has recently been made to me by parties in the United States for information as to the Dutch laws concerning the purchase of plantations in Sumatra by foreigners, and whether foreigners can acquire land in Sumatra, and under what conditions.

The India Mercury, a weekly journal devoted to colonial affairs, and published at Amsterdam, in its issue of last week contained an article discussing the subject of Americans apparently contemplating to enter the field (I might say "fields") of Dutch East India by procuring lands in Sumatra for purposes of tobacco cultivation.

Believing that this matter may be one of more of less importance to certain of our citizens, and that inquiries regarding it may possibly be made at the Department, I concluded that furnishing some information on the subject might perhaps be appreciated.

With this end in view I solicited at and obtained from the department of the colonies at The Hague a written statement, of which the following is a correct translation, viz:

Agreeably to your favor of the 25th instant, I herewith beg to furnish you with some information concerning the granting of lands for agricultural enterprises in the island of Sumatra.

In all the regions (*gewesten*) of that island, which are under the direct administration of the Dutch Government, the governor-general is empowered to grant, on the request of applicants, waste lands on an emphyteutic lease (*erfpacht*) for a term not exceeding 75 years, against an annual quit-rent (*canon*) of 1 guilder per 7,093 square meters).

The application must be accompanied by a certificate of measurement of the lands selected.

The lands granted on an emphyteutic lease are subject to a ground tax amounting to three-fourths per cent. of their estimated value.

No quit-rent or ground tax is levied in the year in which the grounds have been acquired, and in the five ensuing years.

For every workingman employed on the establishment in the service of the tenant, by emphyteusis, a capitation tax (*hoofdgeld*) of 2½ guilders a year is payable.

None but residents (*ingezetenen*) of the Netherlands, or of Netherlands India, and joint-stock companies, or limited-liability commercial corporations established in the Netherlands, or in Netherlands India, are admitted as tenants by emphyteusis.

Ownership in landed property with the privilege of making improvements thereon can be acquired only for small parcels, and when exclusively intended for the erection of industrial establishments or dwelling-houses.

In the provinces governed by indigenous or native princes under the sovereignty of the Netherlands (Siak, Serdang, Deli, Langkat, &c.), belonging to the residency of the east coast of Sumatra, lands for agricultural enterprises are granted by those princes.

The grants conferred by them, based on a temporary cession of the soil against payment of an annual rental or indemnity, are subject to the approval of the Indian government.

The above information, whilst it is entirely authentic as far as it goes, may not be sufficiently detailed and comprehensive to serve the practical purposes of parties in the United States who may have the intention to become interested in the cultivation of tobacco in Sumatra.

If there are any such, it would seem to me to be advisable, if not necessary, for them to apply for further and fuller particulars on the subject, through agents or representatives in the colonies, to the proper authorities there.

In conclusion I deem it interesting to be stated that the two principal companies in Holland engaged in the culture of tobacco in Sumatra, one having its head office at Amsterdam and named the "*Deli-Maatschappy*," and the other at Rotterdam, named the "*Tabak Maatschappy Arendsburg*," have within the last two weeks declared dividends, arising from last year's sales of the crop of 1885, amounting, respectivelly, those of the former to 108½ per cent., and those of the latter to 100 per cent.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, April 6, 1887.

THE YANGTZE-KIANG RIVER.

REPORT OF CONSUL JONES.

I have conversed with Consul-General Kennedy touching an examination of the Upper Yangtze River, in order to study the capabilities of that region for the extension of trade. I also, at the instance of the consul-general, conversed with several of the leading American merchants of Shanghai, who naturally desire additional markets and the promotion and development of trade in the interior.

At Chinkiang I met an intelligent and observant missionary who has visited the Upper Yangtze, and has established a mission at Chunking, a populous city 400 miles above the rapids. It appears that merchants are not permitted to reside at Chunking, or to open establishments or warehouses, so long as steamers have no access to the port. But when steamers have succeeded in ascending the river so far, arrangements can be made to open Chunking to trade. The explanation of this is, that just beyond Ichang, which is 360 miles above Hankow, the river runs through a series of mighty gorges and forms rapids, the possibility of navigating which by foreign-built steamers has never been settled. Mr. Hart, the missionary above alluded to, has passed these rapids several times in native boats, and is of the opinion, which opinion is borne out by other travelers, that they are navigable by small, strongly-built steamers. There is only one rapid, about a mile in length, which offers any serious obstacle, and this, he thinks, can be overcome without great difficulty.

The Yangtze-Kiang is one of the great rivers of the world, which has its source in Thibet and flows through a fertile country 2,000 miles or more to the sea. On its banks are innumerable villages, towns, and cities, which are the outlets to populous regions in the interior.

All this upper river country is described as being very beautiful, of great fertility and capacity for trade, and is perhaps the most populous portion of China.

To give an idea of the vast number of inhabitants, I may mention that this province of Kiang-su has a population of 60,000,000 of people.

It will afford me great satisfaction if I can contribute in any way to the development of American trade in China.

ALEXANDER C. JONES,
Consul.

UNITED STATES CONSULATE,
Chinkiang, China, March 22, 1887.

LEPROSY IN SOUTH AFRICA.

REPORT OF CONSUL SILER.

I have recently read in American papers accounts of the existence of leprosy on the Pacific coast with expressions of fear that the disease may become widespread. This fear is but natural, coming from a country whose inhabitants have heretofore enjoyed immunity from a disease certainly the most loathsome and most to be dreaded to which humanity is heir. A few facts, therefore, pertaining to the disease in South Africa, where it is widespread and apparently increasing, may be of interest at this time.

The date of the first appearance of leprosy in Cape Colony is uncertain, but authenticated cases are mentioned in the old Dutch records upwards of one hundred years ago. The Dutch, at the time the colony passed to Great Britain, were slaveholders and introduced a large number of Malay slaves. Those slaves were obtained from the Malay Archipelago and adjacent islands. Their descendants are very numerous in the colony, Cape Town alone containing 15,000, or one-third of the population. The Malays and their descendants are more subject to leprosy than any other class of inhabitants here, and it seems highly probable that the disease was first introduced in the colony by Malay slaves.

Not until 1845 was any attempt made by government to check or to stamp out the disease. In that year a leper asylum was established at Robben Island, 7 miles from Cape Town, and up to 1884 744 lepers had been admitted to the institution, and comprised but a very small proportion of the leper population, as the segregation of lepers was not made compulsory. In fact, lepers mingle freely with the other citizens, and their appearance is so common that they attract little attention in the streets. At the Cape Town fish market I have seen lepers at work cleaning and curing fish, and the disgusting sight did not seem to deter buyers.

The rapid increase of the disease, particularly among the European population, as described in the recent reports of district surgeons, has aroused the colonial government to action, and a second and larger asylum is in process of construction, the present accommodation being wholly inadequate to provide for all the afflicted applying for admission.

CAUSE OF THE DISEASE.

The primary cause of leprosy has never been determined. It is questionable whether it rises spontaneously. But where there are germs of the disease its spreading is undoubtedly facilitated in great part by dirty living, unwholesome feeding, and loose habits. Exclusive fish diet is dangerous; and the fact is noteworthy that the disease is particularly virulent among the fishing population. One physician who has given much study to the subject attributes to the use of bad fish most of the disease in this colony, though this opinion is not shared in by the majority of authorities. Indeed there are practitioners who deny the fish theory altogether, and point for their support to the fact that leprosy flourishes in countries where fish is rarely eaten.

ITS CONTAGIOUS AND HEREDITARY CHARACTER.

That the disease is hereditary no doubt seems to exist; and that it is contagious is generally admitted by medical practitioners of this country—a small minority even holding it to be infectious. Recent microscopic investigation has established the fact that the diseased tissues and secretions are invaded by numerous parasitical organisms called *bacilli*. This specific bacillus of leprosy is no doubt the true cause, and it is spread by inoculation, either by direct contact with the secretion or suppurating sores of the leper, or transmitted by the clothes, utensils, pipes, &c., containing these parasitical germs of the disease. To touch a leprous person with a sore finger, use the same knife or fork, or to drink out of the same glass, may be the means of communicating the disease. But the same law holds good with leprosy as with other contagious diseases; much depending on individual constitution. Impaired nutrition from insufficient or impure food, unclean habits, exclusive fish diet doubtless predisposes to the invasion of the bacilli, which in a healthy, vigorous constitution would find no admission. While many instances may be pointed out here where men cohabited with leprous wives without contracting the contagion, well authenticated cases are vouched for at the asylum in which the disease was communicated by playing on a flute previously used by a leper, sleeping in a bed previously occupied by a leper, baiting a leper fisherman's hook, &c.

SYMPTOMS.

Dr. Atherstone, an eminent physician and member of parliament, who has made leprosy a special study for over thirty years, has kindly furnished me with the following memorandum describing the symptoms of leprosy as found in Cape Colony:

> There are two distinct forms in this colony, namely, the anæsthetic and the tubercular, but I believe they are both the same specific disease. In the anæsthetic the fingers or toes are first affected—altered sensibility, either a burning sensation or total insensitiveness from the minute peripheral nerves of the skin being affected. In the black races white patches occur on the skin, which are quite insensitive; blebs then form on the fingers or toes, ulceration following, and the joints drop off. In the tubercular form the first symptoms are noticed in the features, the forehead, face, eyebrows, nose, and lobes of the ears swell and become the seat of tubercles; the eyebrows and hair thin and fall off, the mucous membrane of the mouth and throat are affected, and the voice fails. Both forms often coexist together, and nearly always one follows or accompanies the other in the later stage.

The immediate cause of death is usually congestion of the lungs, diarrhea, or general exhaustion. I have seen a man at the asylum with both hands and feet off. One of the worst cases pointed out to me was that of a man with none of his face left, with the exception of a portion of the lower jaw and forehead, the nose, eyes, tongue, and cheek-bones having disappeared. He was only living because the vital organs had been unmercifully unimpaired. It has been my lot to witness much human misery and distress incident to war and contagious epidemics, but I have seen nothing, nor do I believe it possible for the mind to conceive anything, so terrible and abhorrent as the awful picture presented by a congregation of lepers.

TREATMENT.

The disease is considered incurable. The patients who arrive at Robben Island are, as a rule, found to have been badly fed. After admission they get comforts—warmth, good food, and proper clothing—and then the disease becomes stationary for a time, and makes but little progress for a considerable time thereafter. A liberal supply of fatty food tends to keep the disease in check. Carbolic oil, used externally, cod-liver oil, and tincture of blue-gum (Australian Eucalyptus), internally, have been efficacious in staying the inroads of the disease. But after all, these and all other remedies only tend to prolong the disease, for once affected with the leprous taint the victim is doomed to slowly, but surely, rot away until mercifully relieved by death.

PREVENTIVE MEASURES.

Colonial experts agree that the spread of the disease can be prevented, and that it can be stamped out by stringent repressive measures, looking to the segregation of lepers. The result of a parliamentary inquiry held in 1883 was the following unanimous recommendation:

> That it has been conclusively proved to your committee, that by proper measures, energetically and efficiently carried out, it is possible to arrest the further progress of the disease, and ultimately to stamp it out altogether. That for the accomplishment of this object an act for the compulsory segregation of all lepers is necessary, and the establishment of leper institutions in suitable localities where perfect isolation can be secured.

It might be added that the segregation of lepers would avail but little in stamping out the disease, unless the sexes were strictly kept apart, for it is conclusively shown that the disease does not impair the procreative powers, but that, on the contrary, lepers, especially the females, are peculiarly libidinous.

LEPROUS ANIMALS.

The remarkable fact that leprosy is communicable to animals has been observed at Robben Island Asylum, and is vouched for by unimpeachable authority. Pigeons shot near the leper wards have been found with unmistakable symptoms of leprosy; mice have been caught in the leper wards, presenting the usual characteristic symptoms of leprosy. Twelve pheasants sent to the resident surgeon for breeding-purposes died in eight months, and the doctor states that he found clearly defined symptoms of leprosy. Other instances of similar character were given and vouched for. The disease, however, has not manifested itself in any of the rabbits, cattle, swine, or common fowl on the island. But the very fact that the disease is communicable to animals is a matter of considerable importance, for the reason that it may also be communicable to human beings through the agency of animals suffering from the disease being used as food.

CONCLUSION.

The disease presents such strange physiological idiosyncrasies that it is not to be wondered at that medical experts widely disagree on the question of cause and contagious character. A case with which I am well acquainted will illustrate its seemingly mysterious power of propagation. In one of the oldest and wealthiest Dutch families in this colony the mother is a confirmed leper, of the type described as "tubercular," by Dr. Atherstone, before alluded to. The father and a large family of strong, healthy, grown-up sons and daughters show not the slightest taint. I have several times enjoyed the hospitality of this family and availed myself of the opportunity thus afforded of inquiring into this melancholy case with the view of a possible solution. I am assured that neither on the side of the father or mother a case of leprosy had ever occurred in their families, and they are able to trace their genealogy back at least one hundred years. But I ascertained the fact that the husband and wife were first cousins, and that their families had intermarried for several generations. It is just possible, therefore, that the well-known tendency which the intermarriage of blood relations has, *i. e.*, to lower the physical standard, made the wife's constitution predisposed to readily receive the germs of leprosy. But as she is positive in her assertion that she never in any manner came in contact with a leper, the manner in which the bacillus of leprosy was communicated to her must remain an impenetrable mystery.

After sifting the mass of conflicting evidence on the subject, it is safe to lay down the following general axioms applicable to leprosy:

(1) Leprosy is contagious.

(2) Insufficient or bad food (particularly bad fish, or exclusive fish diet), unclean habits and a consequent low constitution, predispose to the disease.

(3) Healthy and vigorous persons, unless they place themselves in reckless contact with lepers, enjoy comparative immunity.

JAS. W. SILER,
Consul.

UNITED STATES CONSULATE,
Cape Town, March 24, 1887.

TROPICAL FRUITS OF VENEZUELA.

REPORT OF CONSULAR AGENT ROMBERG.

Almost all the south coast of the Gulf of Cariaco, about 35 miles long, is suitable to the cultivation of bananas, plantains, cocoanuts, medlars, mangoes, and oranges. Only cocoanuts are raised to any extent, and those not consumed here in the manufacture of oil are exported to the United States. The other fruits, on account of their perishable nature and the want of regular and speedy transportation, are not raised for export. Only about one-third of the area along the coast is under cultivation, all of which is devoted to cocoanuts and sugarcane, though all these lands could be easily utilized for the cultivation of every kind of tropical fruits and vegetables.

The valley of the Manzanares River, extending from the gulf to the village of San Juan, a distance of 12 miles, is spacious and fertile, and is also well adapted to the raising of all kinds of tropical fruits.

The dry season lasts from January to June; the rainy season extends through the rest of the year. On the gulf coasts, the dry season is generally healthy, but during the rainy period frequent cases of malarial fever occur. This malady is rarely fatal, however, and readily yields to quinine treatment. Along the Manzanares River it is uniformly healthy.

The pineapples and grapes of this section are famed for their size and flavor, and, with proper means for export, might be raised in immense quantities. Lands suited to the purpose lie only a short distance in the interior, and are reached by easy roads from this port.

The unsurpassed excellence of the fruits of this section and the facility for their cultivation can be easily demonstrated; so, with the investment of a small capital and the inauguration of quick transportation, a fruit trade of any desired proportions might be readily established. Lands are held at nominal figures and may be obtained on very easy terms. Natives can be hired at 50 cents per day, or at a monthly rate. Farming on shares is also practiced to some extent. There are no export duties levied on fruits, as is the case with other products, and port charges are reasonable.

Much foreign capital is seeking investment in Venezuela, and is being invested in railroads and other costly enterprises. If it be true that the tropical fruit trade is profitable in the United States, and means for speedy transportation from this coast can be cheaply devised, then it is safe to say that this is the place for the business, and that those who embark in it will, from small outlays, reap satisfactory returns.

JOSÉ G. NUÑEZ ROMBERG,
Consular Agent.

UNITED STATES CONSULAR AGENCY,
Cumana, Venezuela, April 4, 1887.

MEXICAN RAILWAY AND TARIFF.

REPORT OF CONSUL ALLEN.

The opportune moment for commercial exploitation of Mexico on the part of the American merchant and manufacturer is near at hand. This opinion is based upon the following facts: First, the extension of the Mexican International Railway, and, second, the revised tariff list, as enacted by the last Mexican Congress, and which goes into effect the 1st day of July next.

THE INTERNATIONAL RAILWAY.

This railway, now drawing rapidly towards completion, commences at Piedras Negras, on the Rio Grande, will connect with the Mexican

Central at Laredo, some 300 miles distant, and ultimately terminate at one of the Gulf or Pacific coast ports of Mexico. It passes through a section of country in the past having but limited commercial relations with the outside world, and where the methods of transportation employed were circuitous, expensive, and occupied much time. The general character of this country is favorable to the development of an extensive and lucrative commerce, containing, as it does, valleys rich and fertile, well populated, adapted to the cultivation of all cereals, and large tracts well wooded and watered. The celebrated Laguna district, one of the most productive valleys in Mexico, is tapped by this line. Its soil is peculiarly suited for the successful cultivation of cotton, being bountifully supplied with water by a natural system of seepage. Irrigation is unnecessary, and the absence of deteriorating influences, such as early and late frosts and heavy rains, enables the planter to harvest his entire crop absolutely free from stain or discoloration. In this district the Mexican cotton-planter, with his primitive methods of cultivation still in use, receives an average yield of 400 pounds of lint (or gin) cotton to the acre, while the average yield of the United States does not exceed 250 pounds; the cost of production to the former is 5½ cents per pound, while that of the latter is from 6 to 8 cents, and the Mexican planter is protected from competition by an import tax of 6 cents per pound on all foreign-grown cottons. Fruits of all varieties are found in this region, and the wine-grape is grown with marked success; a just approximation of its fertility and resources can only be reached by a comparison with the sterility of the frontier.

THE REVISED TARIFF.

Under the operation of the revised import list duties are so largely reduced that many articles of American manufacture will be brought within the reach of the poorer classes, thus creating a demand which hitherto has not existed; especially will this be the case with canned goods and American prints; on the former the duty has been prohibitive, or nearly so; on the latter the reduction in duty is great. Thus the increasing and cheapening facilities for transportation, assisted by confidence and respect for our people, which is the outgrowth of a conviction rapidly becoming fixed in the Mexican mind that American citizenship is a guarantee that its possessor will be protected in every legal and just right, is breaking down all barriers to a full and complete establishment of trade relations on a sure and lasting basis. Spasmodic efforts in this direction will accomplish no permanent good. The American merchant must realize that action, persistent and earnest, is necessary, and to my mind the most efficacious method to be adopted is that of sending active, earnest, and intelligent representatives to the Mexican market. In the large area now opening up, the American should take the initiative; for some time to come he would not be brought into sharp competition with the merchants of the Old World, whose unwearied vigilance has been rewarded by such rich harvests in the older and better settled portions of Mexico.

I cannot refrain from calling the attention of the Department to the imperative necessity of an early determination of the question of the right of a State to levy an import tax on foreign merchandise coming within her jurisdiction. Such a tax now exists in this State (respectfully refer to my dispatch No 20); when enacted, 5 per cent. was the amount levied, since reduced by gubernatorial action to 3 per cent., and the fear that new laws of a like nature may at any time be passed rests as an incubus on the development of trade.

W. G. ALLEN,
Consul.

UNITED STATES CONSULATE,
Piedras Negras, April 7, 1887.

TRADE AT PORT STANLEY.

REPORT OF CONSUL FRANCIS.

The most noticeable feature in the exports from this consulate to the United States during the last six months has been the amount of eggs and green apples, the former valued at $84,017.37, and the latter at $26,002.25, with $7,780 of dried apples, making $33,782.25. The eggs were invoiced at 10 and 12½ cents per dozen; the apples, early part of the season, at 80 cents and $1 per barrel, including the barrel.

The eggs are collected in the country by itinerants, in exchange for goods or money, at 6 to 8 cents per dozen, and taken to establishments erected for the purpose, where they are put through some process which it is said will keep them good for six months or a year, packed in barrels, and shipped.

The apple crop throughout this section was in excess of that of any season for a number of years, and their scarcity in the States bordering the boundary line made them in great demand. Some fears are expressed as to the continuance of this (section) being a good apple-producing country, as it has been noticed the fruit has been growing less perfect and smaller every year, being stained with black spots, penetrating the fruit, and making that of some orchards and of some varieties almost unsalable. It is learned that not many years since plums and all varieties of cherries were produced in this part of Ontario in perfection, but a disease called the "black knot" destroyed nearly all the trees, and it is now said is attacking the apple and pear trees.

The demand for Canadian barley in the States is on the increase (said to be on account of its superior quality), and the crop of last season in many instances was bargained for in advance of being harvested.

The value of barley shipped to the States during the past six months ran up to $111,447.40. Prices ranged from 35 to 37½ cents per bushel.

Within the last three or four months parties from the States have been in this section purchasing horses, succeeding to their satisfaction, and shipping thereto 149 head, valued at $23,913, prices ranging from $75 to $250. Notice has been given that agents from England will shortly arrive, looking for horses for the English cavalry, in view of which and the approaching farming season, the price of good horses has advanced.

Other than a shipment of unhackled flax, of the value of $2,380, no new product is noticed among the exports to the States.

The value of declared exports to the United States during the last quarter amounted to $178,941.33; for the corresponding quarter of 1886, $153,238.59.

The manufacturing industries in this section of Ontario amount to little. In Saint Thomas there are two flouring mills, two foundries and machine-shops, a white-bronze monument establishment, a feather-bone factory, three planing-mills, and one brewery. The large establishment for manufacturing farming implements has been closed for more than a year. Saint Thomas and neighboring towns are offering bonuses in the way of money, free water, and exemption from taxation for a term of years as an inducement for manufacturers to locate therein.

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The number of emigrants to the United States applying to this consulate for certificates as to personal effects during the last six months was 189, of which 62 were heads of families.

ALLEN FRANCIS,
Consul.

UNITED STATES CONSULATE,
Port Stanley and Saint Thomas, Ontario, April 11, 1887.

NOTES.

Foreign dentists in Germany.—Consul-General Raine writes from Berlin, April 9, 1887:

I transmit a translation of the following order, just issued by the president of the police board of Berlin, Mr. v. Richthofen:

"Whereas the royal privy court (*Kammergericht*) by several of its decisions has established it as a principle that only such persons can assume the title of dentist, no matter whether they state 'that they have received a diploma in other countries' or 'have not received a diploma in Germany,' who have previously secured a certificate of qualification from the board of examiners of the German Empire; and whereas the same court has finally decided that the designation of 'American dentist' in connection with the title of doctor is a violation of section 147, No. 3, of the imperial trade law, because such title, resembling that of a regularly approved physician, may lead to the belief that persons assuming the same have been properly approved and examined as medical practitioners in this country: therefore I require of all persons concerned to abstain hereafter from using such designation publicly on signs, cards, in newspapers, and other advertisements, &c., and to remove within three months from their houses, offices, and dwellings all signs of such description, otherwise they must expect that they will be subjected to penalties and other police measures to cause compliance with this order."

Similar orders have been published in other cities of Germany.

Domestic exports, Hawaiian Islands, first quarter 1887 *compared with first quarter* 1886.

Articles.		1887.	1886.	Increase.	Decrease.
Sugar	pounds	66,286,845	67,975,279	....	1,688,434
Molasses	gallons	21,415	15,288	6,127	....
Rice	pounds	2,288,400	1,447,550	840,850	....
Coffee	do	1,500	3,864	....	2,364
Bananas	bunches	12,931	13,402	....	471
Goat-skins	pieces	3,247	3,238	9	....
Hides	do	7,572	6,392	1,180	....
Tallow	pounds	....	15,885	....	15,885
Wool	do	....	73,180	....	73,180
Betel leaves	boxes	94	130	....	36
Sheep-skins	pieces	1,800	3,110	....	1,310
Awa	pounds	1,936	865	1,071	....

Prices of cereals, &c., in Bavaria.—Vice-Consul Hummel, of Munich, under date of April 14, 1887, communicates the following:

Prices of cereals in Bavaria during the twelve months of 1886.

[Per 50 kilograms.]

Months.	Wheat.	Rye.	Barley.	Oats.
January	$2 16	$1 70	$1 70	$1 57
February	2 15	1 72	1 72	1 59
March	2 28	1 77	1 73	1 65
April	2 32	1 74	1 68	1 64
May	2 32	1 70	1 64	1 60
June	2 30	1 70	1 67	1 62
July	2 30	1 60	1 65	1 59
August	2 35	1 67	1 57	1 52
September	2 36	1 79	1 60	1 42
October	2 17	1 68	1 84	1 36
November	2 11	1 67	1 94	1 31
December	2 08	1 67	1 85	1 29
Average	2 15	1 71	1 80	1 48

Prices of victuals, &c., in the eight provinces of Bavaria for the year 1886.

Provinces.	Beer, per liter.	Fuel, per stere.		Bread, per ½ kilogram.		Fats, per ½ kilogram.		
		Beech.	Fir.	Brown.	White.	Butter.	Suet.	Lard.
	Cents.			*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
Upper Bavaria	5.59	$2 32	$1 78	3.459	8.639	24.09	16.69	19.09
Lower Bavaria	5.59	2 14	1 51	4.089	7.609	24.29	16.69	17.09
Palatinate	6.09	1 43	....	2.039	3.009	23.79	11.99	16.69
Upper Palatinate	5.59	2 20	1 66	3.459	7.029	23.89	10.59	17.09
Upper Franconia	5.29	2 38	1 62	3.459	7.009	22.29	11.99	18.09
Middle Franconia	5.79	2 40	1 90	3.409	6.029	22.39	11.99	18.29
Lower Franconia	5.79	2 15	1 74	2.089	6.009	23.79	16.09	20.29
Suabia	5.79	2 60	1 69	4.069	7.009	23.89	10.29	16.29

Provinces.	Meat, per ½ kilogram.			Flour, per ½ kilogram.		Potatoes, per 50 kilograms	Milk, per liter.
	Mutton.	Beef.	Pork.	Rye.	Wheat.		
	Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
Upper Bavaria	11.99	16.69	16.09	4.29	4.89	65.59	4.49
Lower Bavaria	12.29	15.29	14.59	4.39	6.09	61.09	3.59
Palatinate	11.99	13.19	11.99	2.79	4.89	50.09	4.49
Upper Palatinate	11.99	14.89	14.39	3.59	5.89	....	3.79
Upper Franconia	12.89	15.29	14.39	3.39	4.89	57.09	4.09
Middle Franconia	13.09	15.29	14.59	4.89	6.39	57.09	4.49
Lower Franconia	12.09	14.39	14.89	3.19	5.29	48.09	4.89
Suabia	13.89	15.79	15.79	3.59	5.49	71.09	4.09

American lard in Italy.—Consul Sartori writes from Leghorn:

A commission has sat and reported on a revision of the Italian tariff list, and, generally speaking, the duties on imports will be largely increased for the purpose of protecting Italian industries and products. Dr. Gardini, the consular agent at Bologna, reports that a strong effort has been made there to have a duty of 20 lire per 100 kilograms ($3.86 per 220 pounds) imposed on American lard. They publish a letter in which it is stated that by a recent analysis American lard contains 12 to 15 per cent. of water, hidden by means of 2 to 3 per cent. of alum and 1 per cent. of *calce caustica*.

Present state of the wool trade.—Consul Williams writes from Rouen, under date April 20, 1887:

The first fifteen days of April have proved favorable to retail dealers in woolen goods, especially those engaged in making up garments, but the activity among the manufacturers has declined; nevertheless the demand for standard goods of plain cloth still continues.

At Fourmies, combed wool and yarn have held their own with difficulty. Numbers 120 and upwards have declined 25 centimes (5 cents) per kilogram since last month. Soft and clinging fabrics are entirely neglected. It is true that the season for merinos is drawing to a close, and that there is an occasional demand, such as takes place every year at this time, which gives a momentary revival to the market.

At Roulaix, Tourcoing, and Rheims, the orders are not sufficient to supply the factories, and have been taken at prices which are not remunerative, owing to the price of raw material.

During the month of last March, Mazamet sent off 59,994 kilograms of cloth, and 708,859 kilograms of worsted goods. During the corresponding month of last year the shipments were 64,684 kilograms of cloth and 499,112 kilograms of worsted goods.

The statistics of the foreign trade of France, in wool and its products, during the two first months of 1887, compared with that of the corresponding months of the preceding years, indicate the following changes:

Articles.	Imports.			Exports.		
	1887.	1886.	1885.	1887.	1886.	1885.
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Wool	44,901,000	54,497,000	47,827,000	12,617,000	13,033,000	8,555,000
Woolen yarn	1,717,000	2,678,000	2,439,000	3,944,000	4,095,000	3,098,000
Woolen fabrics	9,471,000	12,999,000	11,948,000	47,546,000	50,969,000	40,128,000

The German trade is quiet, in spite of the strenuous efforts put forth by manufacturers to dispose of their goods. It is estimated that Germany has sent 3,000,000 marks worth of cloth to Turkey.

The outlook of the Polish market is not bright, on account of the weakness of the wool market. Russian manufacturers are in a still worse condition.

The state of the woolen industry of Spain is almost desperate. In the principal centers of manufacture the greater part of the machinery is idle, and there appears to be no prospect of improvement in the near or distant future. Numerous failures have taken place there, and many more must follow.

Exports from Austria-Hungary.—Consul-General Edmund Jussen, under date of April 14, 1887, submits the following statement showing the value of declared exports from the consular districts of Austria-Hungary (agencies included) to the United States of America, during the quarter ending March 31, 1887:

Articles.	Budapesth.	Prague.	Reichenberg.	Trieste.	Vienna.	Total.
Amber, crude					$4,037 99	$4,037 99
Art, works of					6,094 67	6,094 67
Bed-feathers		$8,789 56				8,789 56
Beer		6,583 36				6,583 36
Books and paper	$354 56	5,257 61			3,107 08	8,719 20
Black lead		1,514 19				1,514 19
Buttons		44,084 65	$2,016 69		480,374 06	526,475 40
Carriages					1,032 12	1,032 12
Cloth and woolen goods		36,055 67	1,139 36		18,920 07	56,115 10
Cuttle-bones				$5,118 27		5,118 27
Cutlery		4,359 48				4,359 48
Drugs and chemicals		2,574 46		14,235 59		16,810 05
Embroideries and chenilles		5,786 62			6,185 41	11,972 03
Egg-yolk					494 69	494 69
Fancy goods and jewelry		5,860 53	11,769 95		23,012 62	40,643 10
Fans					71,647 69	71,647 69
Fire-arms					635 58	635 58
Fruits:						
Dried	62,641 09	54,803 32		831,144 14		948,648 55
Marmalade of				1,394 21		1,394 21
Furs	783 50					783 50
Furniture		940 26			9,342 19	10,282 45
Glassware	2,729 00	119,474 07	149,186 47		7,441 55	278,831 09
Gloves		19,350 13			7,933 53	27,283 66
Gum				26,960 46	1,122 32	28,082 78
Hair, human		8,318 75				8,318 75
Hemp tow					3,173 37	3,173 37
Herbs and roots				7,305 10		7,305 10
Hops		42,080 88				42,080 88
Insect powder				99,280 53		99,280 53
Leather and skins	116 98	4,216 24		9,243 69	12,208 67	25,785 58
Linen and cotton goods		4,248 88			167,966 36	172,215 24
Macaroni				604 68		604 68
Majolica	756 94					756 94
Meerschaum, crude					7,930 19	7,930 19
Metal goods			433 90		936 24	1,370 14
Mineral water		19,972 91				19,972 91
Musical instruments		838 80			1,640 81	2,479 61
Oils	62 41			1,933 61		1,996 02
Optical goods	599 98					599 98
Ozokerite and glycerine					7,619 31	7,619 31
Petroleum barrels, empty				17,955 75		17,955 75
Porcelain and pottery		90,249 07	279 54		1,371 84	91,900 45
Railroad rails (old)				27,072 86		27,072 86
Seeds				2,316 24		2,316 24
Silks and velvets		41,419 89			28,733 52	70,153 41
Smokers' articles					23,931 55	23,931 55
Sponges				2,289 17		2,289 17
Stained glass					1,971 93	1,971 93
Tartar, crude	6,952 51				29,867 46	36,819 97
Umbrella fixtures	612 19				3,326 83	3,939 02
White lead				2,365 00		2,365 00
Wines and liquors	14,944 82	358 20			5,991 99	21,295 01
Wood pulp					688 04	688 04
Wool				1,229 47		1,229 47
Miscellaneous	85 59	1,467 21	209 70	1,933 56	1,664 68	5,360 74
Total	90,639 57	523,664 74	165,035 61	1,052,382 83	940,404 31	2,772,126 56
Totals for same quarter 1886	28,563 68	368,781 94	158,496 43	301,870 95	795,758 41	1,653,471 41
Increase	62,075 89	154,882 80	6,539 18	750,511 88	144,645 90	1,118,655 15

NOTE.—The average value of the Austrian paper florin during the quarter ending March 31, 1887, was equal to 38.21 cents at Budapesth, 38.28 cents at Prague, 38.34 cents at Trieste, 38.28 cents at Reichenberg, and 38.29 cents at Vienna.

Exports from Frankfort-on-the-Main.—Consul-General Jacob Mueller, under date of March 31, 1887, submits the following statement of exports to the United States from the district of the United States consulate-general at Frankfort-on-the-Main, and the consulates subordinate thereto, during the quarter ended March 31, 1887 (values given in United States gold currency):

Articles.	Aix-la-Chapelle.	Barmen.	Cologne.	Crefeld.	Dusseldorf.
Braids, bindings, and trimmings, &c	....	$277,112 39	....	....	$3,655 00
Books, stationery, photographs, and paper ware	$10,677 72	....	$5,794 17	$16,760 95	....
Buttons and button stuffs, &c	....	102,637 49	....	1,038 29	8,123 20
Caps and cartridges	....	....	....	....	2,053 72
China, glass, porcelain, stone and earthen ware	....	....	7,858 90	....	25,710 20
Cloth	219,218 19	....	....	....	4,403 66
Cologne water	....	....	4,859 87	....	....
Dyes, drugs, chemicals, &c	14,856 00	48,136 18	80,676 16	3,452 33	18,280 78
Fancy goods and toys	....	61,623 83	....	....	....
Glass-plate, window and mirror glass	34,166 90	....	....	....	....
Gloves	47,693 91	....	....	....	....
Hat-bands and ribbons	....	185,533 23	....	....	....
Hops	....	....	3,754 80	....	....
Iron ware, steel, cutlery, &c	....	224,347 74	252,830 53	....	997,525 60
Lead and spelter	10,773 93	....	....	....	....
Leather, hides, and skins	....	....	24,463 43	....	....
Linen, woolen, and cotton goods	....	171,466 77	18,534 66	94,384 85	51,639 46
Machinery	3,868 22	972 42	4,886 89	561 77	7,069 37
Mineral water	3,442 57	....	42,778 75	....	....
Oil and glass paintings and chromos	....	....	....	427 92	3,280 80
Prunes, dried fruits, nuts, land produce, &c	....	12,608 23	....	....	....
Pins and needles	12,993 55	....	....	....	....
Silk, silk goods, velvets, ribbons, and braids, &c	....	64,512 74	135,150 99	1,200,770 90	36,677 30
Smokers' articles, snuff, cigars, and tobacco	....	....	1,634 32	....	....
Soaps and perfumery	....	....	4,436 46	....	....
Sundries	690 40	32,454 81	8,255 07	3,875 48	4,802 28
Steel, manufactured and Bessemer	295,196 08	....	166,014 23	....	....
Wine, brandy, beer, and liquor	....	....	31,255 80	4,350 40	1,180 42
Total	653,572 57	1,181,405 78	793,184 03	1,325,622 89	1,163,820 98
Total for preceding year	370,571 97	1,202,765 49	577,588 08	757,470 33	560,962 82
Increase	283,000 60	....	215,595 95	568,152 56	602,858 16
Decrease	....	21,359 71	....	....	....

Exports from Frankfort-on-the-Main—Continued.

Articles.	Elberfeld.	Frankfort.	Kehl.	Manheim.	Mayence.
Braids, bindings, and trimmings, &c	$8,681 81				
Brushes and hair pencils		$897 21		$54 74	
Books, stationery, photographs, and paper ware		20,247 65	$24,195 10	3,769 68	
Buttons and button stuffs, &c.	4,958 32	26,390 68			
Clay (for pipes)		4,502 18			
China, glass, porcelain, stone, and earthen ware		553 30	18,359 65	794 68	
Cotton dress goods, velvets, and furnishings				1,714 81	
Cloth		8,479 78			
Downs and feathers		6,545 27			
Dyes, drugs, and chemicals, &c.	79,895 26	214,354 51	30,476 65	177,940 70	$92,771 20
Fancy goods and toys		6,569 22		1,763 58	
Fancy paper		250 14			
Glass-plate, window and mirror glass		11,258 09		15,249 61	
Hatters' fur		56,679 68			
Hat-bands and ribbons	26,215 70				
Hair, prepared and raw		7,394 16	1,444 15		1,119 59
Hares' hair		54,417 69			
Hops		6,630 99	1,985 85		21,268 88
Instruments		4,853 98			
Iron ware, steel, cutlery, &c	180,228 46	13,961 25	1,538 35		
Jewelry and precious stones				1,314 00	57,483 17
Leather, hides, and skins		73,853 69	46,271 10	94,428 88	28,345 48
Leather goods		3,298 11			
Linen, woolen, and cotton goods	104,791 12	11,510 07	80,864 25	1,581 99	1,019 82
Machinery		3,008 04		6,926 00	
Mineral water		10,291 81			
Music, musical strings and instruments		588 16	964 30	99 96	
Optical goods		2,046 39			
Oil and glass paintings and chromos		268 49			1,071 00
Platina wire and platinum		11,982 44			
Prunes, dried fruits, nuts, land produce, &c		140,913 79	135 95	45,531 06	499 82
Seeds, plants, &c		6,287 66			
Silk, silk goods, velvets, ribbons, and braids, &c	169,305 26	875 69	59,926 55		
Smokers' articles, snuff, cigars, and tobacco		3,413 05	2,764 20	1,382 54	636 90
Soaps and perfumery		3,526 48			
Sundries	3,927 45	7,915 04	3,400 00	9,865 57	5,841 29
Steel (manufactured) and Bessemer		1,636 99	79,444 05		
Wine, brandy, beer, and liquor		23,463 64	409 60	49,383 81	147,244 36
Watches, clocks, and watchmen's detectors			409 60	307 50	
Total	577,998 88	748,850 34	352,039 85	412,108 61	357,300 51
Total for preceding year	482,440 62	789,756 35	263,277 75	303,558 52	319,284 63
Increase	95,557 76		88,761 60	108,550 09	38,015 88
Decrease		40,906 01			

Exports from Frankfort-on-the-Main—Continued.

Articles.	Munich.	Nuremberg.	Sonneberg.	Stuttgart.	Total for entire district.
Braids, bindings, and trimmings, &c					$288,859 20
Baskets and basket ware		$60,174 28	$4,866 00		65,040 28
Brushes and hair pencils		6,067 81			7,019 76
Bronze powder and leaf metal		163,296 32			163,296 32
Books, stationery, photographs, and paper ware	$12,851 94			$8,303 30	102,600 51
Buttons and button stuffs &c					143,132 98
Caps and cartridges					2,053 72
Clay (for pipes)					4,502 18
China, glass, porcelain, stone, and earthern ware		8,643 78	107,851 47		164,771 98
Cotton dress goods, velvets, and furnishings					1,714 31
Corsets				155,391 78	155,391 78
Cloth					232,096 63
Cologne water					4,859 37
Downs and feathers					6,545 27
Decalcomania		11,295 04			11,295 04
Dyes, drugs, chemicals, &c	1,705 90	15,891 26	8,615 16	204,792 07	991,844 11
Fancy goods and toys		32,633 85	70,596 29		173,186 77
Fancy paper		16,539 57			16,789 71
Glass-plate, window and mirror glass		388,265 45			443,940 05
Gold, silver, and metal paper	15,151 98				15,151 98
Gas-burners, lava gas-tips, brass lamps		6,949 36			6,949 36
Gloves	18,169 60		10,192 85		76,056 36
Hatters' fur					56,679 68
Hat bands and ribbons					211,748 93
Hair, prepared and raw					9,957 93
Hares' hair					54,417 69
Hops		327,414 20			361,004 22
Instruments	1,953 17	8,280 12			10,087 27
Iron ware, steel, cutlery, &c	1,717 19	7,541 74	6,476 73		1,656,167 68
Jewelry and precious stones				3,959 63	62,756 80
Lead and spelter					10,773 93
Leather, hides, and skins	1,988 25			310 89	269,661 72
Leather goods					3,298 11
Leonic ware		14,373 06			14,373 06
Linen, woolen, and cotton goods	7,752 91	5,002 85	132,150 94	92,488 36	772,688 05
Lithographic stones and materials	1,269 78	8,222 90			9,492 68
Machinery					27,292 31
Mineral water					56,513 13
Music, musical strings and instruments	3,593 66		158 27	15,393 61	20,797 96
Optical goods		4,385 39			6,431 78
Oil and glass paintings and chromos	56,890 00				61,942 20
Platina wire and platinum					11,982 44
Prunes, dried fruits, nuts, land produce, &c	6,462 97			103,584 86	309,736 18
Pins and needles					12,993 55
Seeds, plants, &c			12,402 52		13,690 15
Slates and slate pencils, lead pencils		37,718 23	6,856 45		44,574 68
Silk, silk goods, velvets, ribbons and braids, &c					1,667,219 43
Smokers' articles, snuff, cigars and tobacco			2,067 41		11.898 42
Soaps and perfumery					7,962 94
Statuary and sculpture	8,875 32				8,875 32
Sundries	4,122 43	4,983 72	8,918 21	10,215 25	109,267 10
Steel (manufactured) and Bessemer	2,932 91				545,224 26
Wine, brandy, beer and liquor	2,752 15	7,965 53	3,435 70	452 41	271,893 82
Watches, clocks, and watchmen's detectors				953 90	1,671 00
Total	147,690 16	1,120,644 46	374,588 00	595,846 06	9,804,672 12
Total for preceding year	107,999 17	778,320 14	344,461 21	358,166 86	7,216,623 94
Increase	39,690 99	342,324 32	30,126 79	237,679 20	2,588,048 18

Falsification and coloring of French wines.—Consul Roosevelt transmits translations of articles which appeared in the newspapers *La Gironde* and *La Gironde Vinicole*, of Bordeaux, relative to the falsification and coloring of wines:

[From La Gironde of December 23, 1886.]

"*Condemnation of wine merchants, December* 20, 1886.

"Mr. Dufieux, a wine merchant at Romanéche Thorins, has been fined 500 francs and condemned to four days' imprisonment for falsifying wine by the aid of Bordeaux red.

"Mr. Hautz, manager for Widow Thomas, of Béziers, has been condemned to pay 500 francs for falsifying wines and ordered to insert in four newspapers the notice of the seizure and confiscation. The Widow Thomas was declared civilly responsible."

[From La Gironde of March 20, 1887.]

Tribunal Correctional of Bordeaux.—Artificially colored wines.

"On the 21st of January, 1887, Mr. Balade, wine merchant at Bégles, sold by auction, and through the medium of the registrar, wine produced on his estate in 1884 and 1885. Several days after the sale purchasers complained to the tribunal that the wine bought by them had been falsified. An examination was ordered. Mr. Babileé, pharmacist, and Mr. Robineau, expert chemist, proceeded to examine the wines sold and those yet in the possession of Mr. Balade. All were colored by sulfofuchsine. In searching the house of Mr. Balade there were found six barrels of coloring matter and a voluminous correspondence exchanged between him and manufacturers (as many French as foreign) of coloring matter. Piquant details: M. le Commissaire of Bégles proved the transfer of coloring matter from the depot to the residence of Mr. Balade by traces left on the road. Prosecuted by these facts, Mr. Balade was condemned to fifteen months' imprisonment. Yesterday he appealed against the sentence. The tribunal condemned him to ten months' imprisonment, to the posting of the judgment on the door of his residence and wine cellar, and the insertion of the sentence in the newspapers *La Gironde, La Petite-Gironde, Le Bordeaux, La Victoire,* and *Le Nouvelliste,* and ordered the destruction of the wine seized."

[From La Gironde Vinicole of April 1, 1887.

"*Sorrel and the wine merchants.*

"The tribunal correctional of Béziers Herault has just condemned twenty-six wine merchants of Bédarieux to pay fines for falsifying wines and for deception in the merchandise sold. The coloring matter used to give a red color to the alcoholized water sold for wine was sorrel (*Recella tinctoria*)."

It will be seen by the above translations that the French authorities deal rigorously with persons falsifying wines for home consumption, but little, if any, attention is given to wine manufactured for export. Large quantities of Spanish, Italian, and Portugal wines are yearly imported into the department of the Gironde by French wine merchants, who doctor and fortify them in such manner that they are given the color and flavor of genuine Bordeaux, and are placed upon the market as such. The skillful manner in which wines are manufactured and falsified deceive any but a professional wine-taster. If bureaux of analysis were established at such ports of entry as New York, Boston, Philadelphia, New Orleans, and San Francisco, and all wines found containing foreign or noxious matter returned to the country from whence exported, it would compel exporters to ship only pure and wholesome wines to the United States.

In the city of Bordeaux there are one thousand three hundred and seventy-five wine dealers, among which number I can confidently recommend to our public the reliable houses of Barton & Guestier, Nathaniel Johnston & Sons, Cruse fils frères, Boshamer Léon & Cie., Jules Merman & Cie., Dubos frères, Evariste Dupont & Cie., John B. Avérous (Panillac), Eschenauer & Cie., A. Lalande & Cie., Videau fils, Gabriel Sefoupe, F. Robert Schmidt & Cie., Lestapie & Cie., Joseph Cuzol et fils et Cie., H. Toursier & C. L. Bertrin, and J. L. P. Lebèque & Cie. (Contenac).

There is abundant expert testimony to the fact that as good wines can be produced in California as in France. Last year while in the United States I daily used California claret, and occasionally the white wine from the same State, and I do not hesitate to say that I found them superior to the same grade of wines commonly consumed here. It must be admitted that France at present produces finer wines than have yet been made in the United States, but this fact is entirely due to years of experience, exceeding care, and technical skill employed, and not, as is claimed by the French, to superior advantages of soil and climate.* The wine industry in the United States has, owing to wide latitude, as is evidenced by the pure and agreeable wines produced in Virgina, as well as in California, a brilliant future. In view of this fact, there is no reason to doubt that in time there will be brands of our native wines as famous and as much in demand as those of the most celebrated vineyard of France.

Receipts of the Belgian Government.—Consul John H. Steuart, of Antwerp, writes as follows under date of April 21, 1887:

From official figures just published I have been enabled to extract, and to submit herewith, the following statistics and interesting information regarding the state railway, post-office, telegraph, and marine receipts of the Belgian Government during the years 1885 and 1886, as also during the months of December, 1885 and 1886:

Railways.—The net receipts during the year 1886 amounted to 112,615,238 francs, against 115,748,434 francs the preceding year, showing a decrease for 1886 of 3,133,196 francs, or 2¾ per cent. The great difference between the receipts of 1885 and 1886 is attributable to the International Exposition that was open at Antwerp from May to October, 1885, and drew an immense number of visitors.

When comparisons between the months of December, 1886, and 1885, are made, after the closing of the exposition, a large difference is shown, in proportion, in favor of the year 1886, the receipts having been 10,059,765 francs against 9,444,155 francs in December, 1885, showing an increase for December, 1886, of 615,610 francs, or 6½ per cent.

The receipts, as stated, in the above-named months of December, 1886 and 1885, were derived, according to the nature of the subject or article conveyed, as follows: Passengers, 2,627,857 francs in December, 1886, against 2,565,127 francs during the same month of 1885; baggage, 52,706 francs, against 51,058 francs; parcels and small boxes of merchandise, 708,082 francs, against 747,159 francs; large merchandise, 5,491,855 francs, against 5,074,250 francs; cash or bullion, 21,433 francs, against 20,307 francs; carriages, 2,978 francs, against 5,339 francs; horses and cattle, 97,906 francs, against 92,279 francs, and other products, 1,056,948 francs in December, 1886, against 915,643 francs during the same month of 1885.

The average per day and per kilometer amounted to 103.8 francs in December, 1886, against 96.06 francs in December, 1885.

Post-offices.—The post-office receipts of the state during the year 1886 aggregated 14,800,982 francs, against 14,399,980 francs the preceding year, showing a difference in favor of 1886 of 401,002 francs, or nearly 3 per cent. During the month of December, 1886, the receipts were 1,524,317 francs, against 1,435,265 francs during the corresponding period of the preceding year, showing an increase for 1886 of 89,052 francs, or over 6 per cent.

The following is a synopsis of the business effected for account of third parties: Commercial bills were collected to the amount of 31,336,870 francs in December, 1886, against 28,865,891 francs for the same month of 1885; post-office orders, 8,871,868 francs, against 8,752,816 francs; receipts and acquittances collected, 5,583,912 francs, against 5,055,190 francs; savings-fund receipts, 5,155,580 francs, against 4,464,558 francs; subscriptions to newspapers and journals collected, 1,471,266 francs, against 1,505,882 francs; "bons de poste" collected, 588,496 francs, against 514,780 francs; coupons collected, 49,407 francs, against 48,224 francs in December, 1885.

By the above figures it is shown that there was a general increase for December, 1886, in all branches of post-office business.

Telegraph offices.—The receipts of the telegraph offices aggregated 2,868,546 francs during the year 1886, against 2,774,278 francs the year previous, showing an increase for 1886 of 94,268 francs, or 3¼ per cent.

The net receipts during the month of December, 1886, amounted to 233,716 francs, against 209,107 francs during the same month of the preceding year, showing a gain for December, 1886, of 24,609 francs, or nearly 12 per cent.

Of the amount thus collected, 108,817 francs was received for 189,538 telegrams destined for the interior of the Kingdom, 92,912 francs for 126,566 telegrams sent to foreign countries, and 19,315 francs for 40,344 telegrams sent in transit through Belgium. In December, 1885, the amounts were 99,801 francs, 76,933 francs, and 17,873 francs respectively for 175,026 telegrams destined to the interior of Belgium, 105,456 to foreign countries, and 33,865 passing through Belgium in transit.

Again, there were collected for various services in December, 1886, 12,672 francs, against 14,501 francs during the same month of 1885. This last named is the only item where a decrease for 1886 is marked.

Marine receipts.—The total receipts during the year 1886 aggregated 3,644,526 francs, against 3,638,313 francs the year preceding, showing the slight increase for 1886 of 6,213 francs. Said receipts were derived from the following sources: The mail and passenger service between Ostend and Dover, taxes on pilotage and towage, light-house tax, maritime-police tax, and the ferry receipts across the Scheldt at Antwerp.

During the month of December, 1886, there were received from the above-named sources 300,407 francs, against 289,079 francs during the corresponding period of 1885, showing an increase for 1886 of 11,328 francs, or nearly 4 per cent.

The receipts in December, 1886, from the different sources, compare with the corresponding period of 1885 as follows: From the mail and passenger service between Ostend and Dover were collected 30,378 francs in December, 1886, against 26,488 francs during the corresponding month of 1885. The taxes upon pilotage and towage amounted to 186,148 francs, against 181,670 francs; the light-house taxes to 73,403 francs, against 70,017 francs; the maritime-police taxes to 8,159 francs, against 8,698 francs, and the ferry receipts across the Scheldt at Antwerp to 2,319 francs in December, 1886, against 2,206 francs in December, 1885. It is hereby shown that an increase for 1886 has been marked in every item but one, the maritime-police taxes, where a slight decline for last December is shown.

Argentine harvest of 1887.—Consul E. L. Baker, of Buenos Ayres, writes as follows, under date of March 31, 1887:

From all parts of the Argentine Republic the reports in reference to the crops are of the most promising nature. The harvest is now nearly complete, and it is pronounced by those who are engaged in the grain trade to be, by all odds, the largest and most satisfactory crop that was ever produced in the country. Not only has there this year been a much larger breadth of land put down in cereals, but, owing to the exceptionally fine season and the absence of locusts, it has generally been saved in excellent condition. I was making inquiries in regard to the estimated yield, but I find in the Buenos Ayres Standard of this morning the following article, prepared by Mr. M. G. Mulhall, the well-known statistician, and give it as a very fair exhibit; but I think his figures are rather under than above the general opinion on the subject:

"Although all the crops are not yet gathered, we can arrive at a pretty close estimate of their quantity and value. The total area under tillage in 1884 was 650 square leagues, and is at present about 800 square leagues, that is, five and a quarter million acres, or 1,250,000 cuadras. According to the latest information that we possess, the agricultural area is distributed more or less in the following manner:

Provinces.	Cuadras.		
	Wheat.	Other crops.	Total.
Buenos Ayres	180,000	275,000	455,000
Santa Fé	220,000	190,000	410,000
Mendoza	10,000	80,000	90,000
San Juan	10,000	44,000	54,000
Entre Rios	15,000	45,000	60,000
Tucuman	9,000	33,000	42,000
Cordoba	17,000	15,000	32,000
Various	42,000	68,000	110,000
	503,000	750,000	1,253,000

"The value of the crops in 1884 was estimated at fifty-seven millions of hard dollars, and at present reaches something close on $70,000,000, computed not in depreciated paper money, but in gold, that is, about £14,000,000, as compared with £24,000,000 produced annually by pastoral industry.

"Wheat is a very good crop in the irrigated lands of Mendoza and San Juan, where a cuadra produces 3 tons, say 30 bushels to the acre; but in Buenos Ayres and Santa Fé the yield is less than 1 ton per cuadra. Although the crop this year has been larger than usual, we do not think it will exceed 500,000 tons, or 20,000,000 bushels, and as our consumption averages 3 bushels per inhabitant, we shall have a surplus of 10,000,000 bushels for exportation, worth (at last year's prices in Liverpool) six million hard dollars.

"Maize covers an area of 240,000 cuadras, yielding about 2 tons per cuadra; the export averages 210,000 tons yearly, and may reach this year 250,000 tons, representing a value of $4,000,000.

"Linseed covers 30,000 cuadras, the crop this year being put down at 47,000 tons, or one-fourth more than that of 1886. Its value is about $2,000,000.

"Sugar covers 12,000 cuadras, yielding altogether 40,000 tons, which, according to European prices, represent a value of $3,000,000.

"Tobacco has an area of 3,000 cuadras, and the crop usually approaches 8,000 tons, worth not much over $1,000,000, the province of Corrientes yielding more than half the entire crop.

"Wine, in good years, amounts to close on 6,000,000 gallons, the product of 16,000 cuadras, and its value on the place of vintage reaches $1,500,000.

"Alfalfa, or more correctly alfa, covers an area variously estimated from 360,000 to 400,000 cuadras; the crop averages 2,500,000 tons, worth about $25,000,000. The quantity exported as hay rarely exceeds 15,000 tons per annum, worth $200,000.

"Fruit, vegetables, &c., cannot be estimated with any precision, but cover at least 50,000 cuadras, producing a yearly value of $5,000,000 or upwards.

"Summing up the foregoing crops, we find the gross value produced and the amount exported stand as follows:

Crops.	Total crop.	Export.
Wheat	$12,000,000	$6,000,000
Maize	8,000,000	4,000,000
Linseed	2,000,000	2,000,000
Sugar	3,000,000	....
Tobacco	1,200,000	....
Wine	6,000,000	....
Alfa	25,000,000	200,000
Fruit, &c	5,000,000	....
Total	62,200,000	12,200,000

"In the above table it must be observed that wheat is put down at the low estimate of twenty-four gold dollars per ton, and the other values are no less moderate. It may therefore be assumed that our crops this year will reach a value little short of $70,000,000. In our Hand-book of 1885 we showed that the capital in tillage in the Republic reaches $230,000,000. The crops, therefore, represent a gross return of 30 per cent on capital. The agricultural (non-pastoral) population comprises between 85,000 and 90,000 families, whose labors represent a product averaging $800 per annum for each family."

A well-known grain broker, who keeps himself well posted and to whom I submitted the foregoing articles, thinks that Mr. Mulhall is much below the actual figures in his estimate of both wheat and maize. He thinks that, after meeting all home requirements, there will be a surplus of quite 15,000,000 of bushels of wheat for exportation, and of fully 500,000 tons of maize or Indian corn. Indeed, he says, from the information he has received, he puts down the maize crop at more than double what it ever was before.

The question whether it will pay, at present rates abroad, to ship the surplus of wheat and maize to European markets, would seem to be settled in the affirmative, from the fact that already several cargoes have gone forward from Rosario, and a large amount of additional tonnage is under grain charter for the English Channel.

The quotations of wheat yesterday in this market were from $3.50 to $.550 paper per 100 kilograms, equal to from $2.50 to $4 gold. The price of Indian corn was $2.80 paper per 108 kilograms, equal to $2 gold; but these prices will soon be lower.

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REPORTS

FROM THE

CONSULS OF THE UNITED STATES.

JUL 30 188

No. 80.—JUNE, 1887.

DEPARTMENT OF STATE
UNITED STATES OF AMERICA.

WASHINGTON:
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ON

COMMERCE, MANUFACTURES, ETC.

No. 80—June, 1887.

The reports contained in this number have been selected from the annual reports of the consular service prepared for publication in the volumes known as "Commercial Relations." As the edition of these volumes is comparatively small and unequal to the demand, the more important and interesting matters they contain are comprised in this issue of the Consular Reports, and published in advance of the Commercial Relations. As rapidly as new numbers can be made up subsequent issues will be printed, including the more important reports from the rest of Europe, Asia, Mexico, Central America, South America, and Australia.

AUSTRIA-HUNGARY.

Report of Consul-General Jussen on the commerce, industries, &c., of Austria-Hungary.

TRADE REVIVAL.

Although the United States of America and its commercial progress are hardly ever discussed in the Austrian press during the year, they are quite sure of honorable mention when the first day of a new year makes its appearance and when the national economists feel called upon to make up the balance-sheet and to compare the condition of their own people with that of the Western Republic.

For the last six months of 1886 the business of this Empire has materially improved, and although the admission is made somewhat reluctantly, still it is made, and Austrian journalists confess that the first impulse and cause for this improvement arose in the United States, and that the increase of exports from Austria and the consequent benefit to the industries of the Empire were a direct reflection of the revival of trade beyond the Atlantic.

This revival of American trade and business generally during 1886 has had a twofold effect upon the business interests of Austria. The increased exportation of Austrian manufactures has, as a matter of course, stimulated many industrial establishments, and a long list of raw materials has gradually risen in price and value.

WAR CLOUDS.

But in spite of this decided increase of trade, and in spite of the revived hope of manufacturers and exporters, there is a deep-seated want of confidence in future commercial prosperity. If peace could be assured then all might take hope and better times might reasonably be expected; but if the Bulgarian complications should finally culminate in a war with Russia, the injury to Austrian-Hungarian industrial and mercantile interests will be simply incalculable. And in the face of Bismarck's peaceful assurances, careful business men here seem to believe that the clash of arms in the coming spring is unavoidable. The burden of such a war, its sacrifices and misfortunes, will fall heaviest upon Austria. Even if England and Italy should be drawn into the contest, the Austrian-Hungarian monarchy would of necessity carry the greatest weight of the conflict, and whether victorious or not, the result would, at least in an industrial and commercial direction, be equally ruinous.

The theater of action would in all probability soon be transferred from Bulgarian to Austrian soil, and even before the first battle was fought the manufacturers of the country and all those ramifications of business which follow in their train would receive an almost fatal blow. The moment that the army of Austria-Hungary is placed upon a war footing and the reserve is called to arms, the factories and offices and business houses will be depopulated; and if the demand for Austrian manufactures continued it could not be supplied, for the skilled laborer would be handling a musket instead of turning a tool. Only men above forty years of age would be left at home, insufficient in number, strength, and skill to fill the great void created by the war.

The credit of the Austrian importer would certainly suffer to the same extent to which the business of the exporter would be reduced, because the home demand for all imported commodities would suddenly cease, and in all probability collections of outstanding accounts would be more problematical than in times of peace. Add to this the unavoidable necessity of increased taxation for the purpose of paying the expenses of war, the increased costs of the necessaries of life, the sudden embargo which war would impose upon the fine arts and their development and culture, which are important factors in the life of an Austrian, and it would seem as if ample reason for apprehension were apparent, and confidence in industrial and commercial progress and improvement could not well be established until at least a brief peace is absolutely assured and the Oriental question settled, if only for a short series of years, for a final and conclusive settlement without war and its attendant sacrifices seems to be entirely out of the question.

The importation of American manufactures and products into Austria-Hungary is as yet inconsiderable, sole leather, agricultural machines, wheels, spokes, &c., and petroleum comprising the main articles of import. The exporters of these articles have undoubtedly safe and reliable connections, and it is, therefore, probably quite superfluous to suggest that they should study the political horizon and the ever-changing phases of the Oriental question quite as diligently as their market reports.

MEANS EMPLOYED TO INCREASE THE EXPORT TRADE OF AUSTRIA.

During 1886 several earnest and quite well-chosen efforts have been made to increase the export trade of Austrian manufactures to foreign countries. The minister of commerce has issued an address to the sev-

DUTIES ON RAW MATERIALS.

To mention only one or two examples showing the distinction between our tariff and that of Austria on raw materials required in the manufacture of furniture, I will state here that marble, raw and cut in blocks or slabs, is free of duty, and that all kinds of wood, raw or prepared, European or foreign, is also free of duty under the Austrian tariff, except veneers, upon which, if unpolished, a duty of 60 cents per 200 pounds is imposed; whereas, under the tariff of the United States, marble of all kinds in block, rough or squared, pays a duty of 65 cents per cubic foot veined, sawed, or otherwise, and in slabs $1.10 per cubic foot. Cabinet wood, in logs, round, and as unmanufactured timber, not otherwise specified, is free; but black-walnut lumber pays duty as sawed lumber, and all manufactured wood not otherwise specified 20 per cent. ad valorem, and veneer produced by cutting pays 35 per cent. ad valorem.

AMERICAN WINES.

The question whether American wines will displace those of Hungary in the markets mentioned will, I have no doubt, be answered in the affirmative before many years have elapsed. California, Missouri, and Ohio clarets and white wines certainly need not fear competition with the lighter wines of Hungary, and the "Tokayer" brand will probably alone remain an inimitable and unapproachable specialty.

EXPORTS AND IMPORTS OF AUSTRIA-HUNGARY DURING 1886.

The official statistics showing the total of the export and import trade for 1886 has as yet not been published, and, as I know by last year's experience, will not be ready for publication until the end of March. I can therefore give exact figures as to the total amount only for the period from January to September, 1886. To facilitate comparison and to enable parties interested to judge of the fluctuations of trade for a series of years, I give the figures from 1877 to September, 1886.

Years.	Exports.	Imports.	Excess of exports.	Years.	Exports.	Imports.	Excess of exports.
	Florins.	*Florins.*	*Florins.*		*Florins.*	*Florins.*	*Florins.*
1877	666,600,600	555,300,000	111,300,000	1882	711,900,000	654,200,000	127,700,000
1878	654,700,000	552,100,000	102,600,000	1883	749,900,000	624,900,000	125,000,000
1879	684,000,000	556,600,000	127,400,000	1884	691,500,000	612,600,000	78,900,000
1880	676,000,000	613,500,000	62,500,000	1885	672,100,000	557,900,000	114,200,000
1881	731,500,000	641,800,000	89,700,000	1886*	526,700,000	411,900,000	114,800,000

* To September.

These figures show that the import reached the highest point in 1882, and that since then, *i. e.*, up to 1886, it has decreased more that 100,000,000 florins. The export now is no larger than it was ten years ago, and the import has also decreased almost 100,000,000 florins since 1882. Both results are attributed to the protective tariff policy of Austria-Hungary and the other nations of the European continent, a policy inaugurated partly in retaliation and partly upon original principle. There is, as usual, a hue and cry for reform, but, as may be expected, no unanimity of opinion as to the means to bring it about.

The following table comprises the main articles of export and import from January to October, inclusive, 1886, and the respective quantities:

EXPORT.

[1 meter centner=221½ pounds.]

Articles.	Quantity.	Articles.	Quantity.
Barley ... meter centners	1,830,000	Hides, raw ... meter centners	27,999
Bed feathers ... do	23,515	Mineral waters ... do	141,276
Beer ... do	319,979	Paper, of straw and wood ... do	144,639
Brown coal ... do	32,381,865	Shoes ... do	14,175
Bark and roots for tanning purposes ... meter centners	290,461	Sugar ... do	1,600,000
Eggs ... do	391,310	Wheat ... do	1,859,000
Fruit, green ... do	604,540	Wine:	
Fats ... do	67,310	In barrels ... do	638,598
Felt hats ... do	1,149	In bottles ... do	3,956
Furniture, wooden ... do	82,881	Wood for purposes of manufacture ... meter centners	5,726,765
Glassware, hollow ... do	205,521	Woolen clothing ... do	7,246
Hay ... do	304,618	Wooden ware ... do	132,819
Hogs ... do	339,245		

IMPORT.

Articles.	Quantity.	Articles.	Quantity.
Barley ... meter centners	134,165	Mineral oils—continued.	
Caoutchouc ... do	2,259	Refined, duty 10 florins per 100 kilograms ... meter centners	184,595
Corn ... do	806,977	Oats ... do	138,840
Cutlery, fine ... do	461	Olive oil ... do	28,535
Distilled spirits ... do	3,337	Rubber goods ... do	1,359
Flax ... do	190,557	Rye ... do	601,380
Hogs ... do	309,859	Sheep and goat skins:	
Hard coal ... do	20,405,255	Dressed ... do	17,794
Hardware:		Raw ... do	25,512
Fine ... do	4,618	Straw hats ... pieces	237,945
Tools ... do	8,567	Staves ... meter centners	34,343
Hides, raw ... do	101,425	Wool, unwashed ... do	143,083
Jute ... do	113,287	Wheat ... do	189,472
Mineral oils:		Watches:	
Heavy, artificial Russian, duty 1.10 florins per 100 kilograms, meter centners	467,385	Gold and gold-plated ... pieces	49,739
Light, American crude, duty 2 florins per 100 kilograms ... meter centners	159,673	Silver and silver-plated ... do	158,331
		Other watches ... do	16,243
		Total watches	224,813

The revenue from the import duties of Austria-Hungary from January to October, inclusive, in 1886, amounted in all to the sum of 34,278,902 florins, of which about 14,750,000 were collected in gold. This amount falls short nearly 4,500,000 florins of the duties collected during the same period in 1885.

PETROLEUM.

The figures showing the import of mineral oil from January to October (inclusive), 1886, when compared with those for the same period of 1885 prove quite conclusively that the artificial Russian oil has interfered seriously with the American petroleum trade in this Empire.

During the period in question, in 1885, 344,410 meter centners of light crude American oil were imported against only 159,673 meter centners in 1886.

The figures from 1885 show from January to October (inclusive) an importation of 343,072 meter centners refined mineral oil against only 184,595 meter centners during the same time in 1886.

On the other hand the importation of the Russian artificial oil (heavy, *i. e.*, mixed with 15 per cent. tar, artificial) has during the same period of time increased fully 250 per cent., as shown by the following figures:

From January to October (inclusive), 1885, only 177,127 meter centners heavy crude oil were imported, while during the same period in 1886 the figures mount up to 467,385 meter centners.

More conclusive proof could not possibly be furnished that the fraud upon the customs by means of the importation of Russian artificial oil has been completely successful, to the great injury of the treasury of Austria. The loss to Austria in the shape of unpaid duties during the period mentioned, if the decline of the importation of refined oil is taken into consideration, and if, furthermore, the fact is considered, as it should be, that all the Russian artificial oil imported is refined at the Hungarian refineries and pays a so-called consumption tax to Hungary *alone*, amounts, according to my calculation, in round figures to 4,000,000 florins.

No wonder, then, that the Austrian minister of finance has again and again attempted to persuade the Hungarian Government to suppress this much lamented and much criticised fraud and to agree to a strict enforcement of the tariff according to its spirit and intent. But thus far all efforts in this direction have been in vain. Only a few days since a conference of the representatives of the two Governments took place in Vienna, and after a protracted session and animated debate of the question at issue the session was adjourned *sine die*, as far as can be ascertained, without reaching an understanding.

EXPORTS TO THE UNITED STATES.

The increase of the exports from Austria-Hungary to the United States forms one of the few bright leaves in the commercial history of this monarchy for 1886. The schedule herewith inclosed marked Schedule A, contains a statement of the exports from all the consular districts of Austria-Hungary (agencies included) for the year ending December 31, 1886, and shows an increase of exports of $1,152,656.40 over 1885; and the schedule herewith inclosed, marked Schedule B contains a statement of exports from the consular district of Vienna during the four quarters of the year 1886. The value of exports from this consular district to the United States during this year is by far the largest since the establishment of the consulate at Vienna. In connection with the subject of the export trade from Austria to the United States, I desire to mention the results of my experience during the year last past with reference to the

BRANCH HOUSES OF AUSTRIAN MANUFACTURERS ESTABLISHED IN THE UNITED STATES.

I am quite well aware that this is not a new subject, and that American importers are fully cognizant of the injury to their business arising from the fact that European manufacturers establish branch houses in New York, Philadelphia, Boston, &c., to whom they invoice their wares at manufacturer's cost—that is, at a rate below that for which the American merchant, who is required to pay a profit in addition to manufacturer's cost, can purchase the same article in the European markets.

The American importer will probably contend that if the United States consuls abroad perform their whole duty they will insist upon it that all invoices authenticated by them should contain the true and correct market price of the goods invoiced, which true market price consists as provided by regulations of the cost of manufacturing, with the usual percentage of profit added.

This, undoubtedly, is the correct theory, but like most other theories it is sometimes difficult to carry it into practice. If the goods invoiced are staple articles, there is of course little difficulty in fixing the true market price, but if the invoice contains novelties, articles of luxury, the shape and quality of which change rapidly with the requirements of fashion, a consul will find it somewhat difficult to determine the value of these goods upon and from his own knowledge. Even a consul, educated as a merchant and with the experience of a long series of years in handling and dealing in merchandise, would be at a loss to fix the exact market value of such articles as fine metal or bronze ware, fans, leather goods, oil paintings, painted and decorated fancy glassware, terra cotta ornaments, statuary, porcelain, ornamented plaques, and other articles of luxury, all of which contribute in a considerable measure to the sum total of exports to the United States.

In this dilemma he has but one recourse, and that is to call in experts, *i. e.*, exporters and dealers in the articles mentioned, and to ask their opinion as to the value of the goods in question. But I have found, to my regret, that this sort of auxiliary is not absolutely reliable in detecting or proving an undervaluation.

The ramifications and connections created by trade are so intricate and the latter are often of so intimate a nature, that the real truth is not always attainable. Though the name of the shipper is not disclosed by the consul, these experts seem to know from the general shape, character, and appearance of the goods who the manufacturer is, and in most cases there is a certain reluctance to give an opinion even against a competitor in trade. There is a sort of commercial freemasonry extant among these gentlemen, which possibly, in their circle, is as powerful and influential as the *esprit de corps* in the army.

The question arises, If consuls by reason of the facts stated are not in a position to detect and to prove undervaluations, by what means is this purpose to be accomplished? Is there no adequate remedy against the practice by which European manufacturers export their products to their own firms, or to some man of straw (representing their firm in the United States), at mere manufacturer's cost, paying less duty than the honest American importer, and thus fraudulently placing themselves in a position to undersell all their American competitors? Is the experience to be repeated again and again and *ad infinitum*, that Europeans repair to an American port of entry, import their own European manufactures under the conditions mentioned, amass a fortune within a few years, and return to their home laden with wealth acquired in a country toward which they never performed or assumed the smallest duty as citizens, and for whose institutions, progress, and success they never cherished the slightest sympathy? Is it fair and just that these unconscionable cosmopolitans should enrich themselves at the expense of our countrymen and of our national Treasury?

The remedy for this condition of things, which my brief experience seems to suggest, lies with the appraisers and the experts cited by them at the port of entry where the shipments are landed. There is but one class of experts who can give a fair and impartial opinion as to the value of goods purchased in the European markets, and these are the American importers, who neither own nor represent European factories, who deal in the same line of goods, purchase them abroad, and consequently pay for them not only the cost of manufacture, but in addition to this the usual percentage of profit, or, in other words, the fair and true market price which obtains at their place of manufacture. If the appraisers engage the services of experts who themselves are but temporary residents of the United States, representing a European manufacturer, it may well be expected that such experts will consider the cost of manufacture alone a fair criterion of the market price.

As a matter of course there are many shipments as to which the consul can gather satisfactory and reliable information, but when he cannot, then it would seem experts at the port of entry of the character and nationality mentioned could make a fair estimate of value.

EDMUND JUSSEN,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, January 15, 1887.

BELGIUM.

Report of Consul Slade.

COMMERCE.

The total importations and exportations of Belgium (including the transit trade) for 1885 amounted to $964,440,300, or about 8 per cent. less than in 1884. This reduction does not, however, imply a decrease in the general movement of trade, as the price of all merchandise was materially less during the former year. The total importations in 1885 amounted to $497,476,800, or a decrease of 7 per cent. as compared with 1884. The total exportations were $466,963,500, or a decrease of 10 per cent.

The special commerce of Belgium (viz, foreign merchandise consumed in Belgium, added to the products of Belgian soil and industries exported to foreign countries) in 1885 amounted to $491,590,300, or 8 per cent. less than in 1884. The total value of foreign merchandise consumed in Belgium in 1885 amounted to $259,971,000, and in 1884 to $275,160,100, being a difference of about 6 per cent. The total value of Belgian products and industries exported to foreign countries in 1885 was $231,600,000, being 10 per cent. less than in 1884.

Exportations and importations (deducting transit commerce) of Belgium with the different countries for 1885.

Countries.	Importations.	Exportations.	Total.
Europe:			
France	$49,890,500	$62,126,700	$112,017,200
Germany	32,732,800	39,314,100	72,046,900
Holland	37,943,800	35,261,100	73,204,900
England	32,539,800	45,914,700	88,454,500
Russia	17,968,300	1,177,300	19,145,600
Italy, Spain, Austria, &c	15,169,800	22,187,100	37,356,900
Other European countries	9,418,400	5,616,300	15,034,700
America	46,455,100	14,668,000	61,123,100
Asia	16,173,400	4,342,500	20,115,900
Africa	1,698,400	1,042,200	2,740,600
Total	259,990,300	231,600,000	491,590,300

It will be perceived that European countries represent 83 per cent. of the commerce and Asia, Africa, and America only 17 per cent. In 1884 the proportion was for European countries 82.6 and for the other countries 17.4 per cent.

During the first eleven months of 1886 as compared with the same months in 1885, the total importations have decreased 2 per cent., whilst the exportations have increased 1 per cent. The following are the principal articles imported which have increased:

Live cattle	$1,041,235
Butter	498,905
Flour	403,370
Rice	360,717
Meats	556,033
Guano	1,807,831
Raw silk	742,049
Petroleum	2,582,147
Leaf tobacco	522,450

The following articles have decreased:

Building-material (wood)	444,286
Wood for manufacturing purposes	539,821
Coal	546,190
Wheat	265,761
Rye	300,887
Barley	510,871
Oats and corn	1,100,293
Linen thread	563,753
Grease	693,449
Raw tow	320,380
Hardware and notions	209,019
Copper and nickel	610,459
Raw hides	504,116
Sirup and molasses	257,076
Woolen goods	417,266
Oleaginous grain	1,443,254
Wine	331,381

Of exportations for first eleven months of 1886, as compared with same months of 1885, the following articles have increased:

Live animals	$127,109
Horses and colts	615,670
Candles	267,305
Meat	346,049
Rags	415,143
Knitting-wool	1,849,326
Raw tow	490,413
Raw flax	1,732,175
Raw silk	755,209
Hardware and notions	297,606
Steel bars and wire	354,734
Manufactures of steel	204,966
Old iron	258,041
Sheet-iron	240,864
Manufactures of iron	585,369
Cast iron	129,477
Raw hides	546,383
Chemical products	280,622
Raw sugar	1,517,366
Cotton goods	316,906
Common glassware	310,730

During the same period the following articles have decreased:

Coal	$196,860
Butter	353,962
Rye	783,580
Barley	810,021
Oats and corn	731,470
Linen thread and vegetable fibers	2,435,274
Vegetable oils	540,014
Railroad and street cars	1,434,147
Grease	698,853
Steel rails	305,133

Copper and nickel	$368,883
Building-stone	521,136
Woolen goods	935,278
Oleaginous grain, (flax seed, &c.)	281,780
Hops	402,405

COMMERCE OF BELGIUM WITH THE UNITED STATES.

The importations from the United States into Belgium, which in 1884 amounted to $31,015,100, were reduced in 1885 to $23,237,200, a falling off of 25 per cent. The principal decrease was in the following articles:

Grain of all kinds	$8,982,209
Flour	894,555
Cotton	551,198
Rosin and bitumen	93,026
Raw mineral ore	72,182
Chemical products	68,901
Coffee	51,997
Raw hides	53,075

The following articles increased:

Oleaginous grain (flax-seed, &c.)	$937,298
Leaf tobacco	806,933
Copper and nickel	546,383
Meats	530,943
Lard and grease	399,317
Sirup and molasses	99,009
Art objects	66,199

The exportations from Belgium to the United States, which in 1884 were $7,643,800, fell off to $6,407,600 in 1885, a decrease of 16 per cent. The following articles decreased:

Window-glass	$769,105
Rolled iron and iron bars	228,898
Drugs	208,633
Clothes	144,171
Wooden ware	103,062
Rags	86,464
Tanned and prepared skins	79,323
Arms	76,621

The following articles increased:

Plate-glass and glassware	$137,666
Chemical products	100,939
Hemp and flax	88,008
Woolen goods	61,567
Linen goods	57,900
Machinery and tools	51,917
Colors and dyes	42,846

EXPORTATIONS TO UNITED STATES FOR 1886 FROM THE CONSULAR DISTRICT OF BRUSSELS.

The exportations from this consular district (as per accompanying table) for the year 1886 were $3,124,285.46, being an increase of $193,562.40 over 1885. The principal articles of exportation were as follows:

Articles.	Value.	Articles.	Value.
Corsets	$107,793 00	Rabbit-skins and furs	$330,569 00
Glass	132,969 00	Vegetable fiber	62,587 00
Gloves	222,740 00	Plate-glass	163,404 00
Lace goods	205,586 00	Window-glass	1,255,738 00
Linen goods	201,350 00	Iron and steel	187,733 00

COAL MINES.

The principal coal-producing district in the Kingdom is Hainaut (in this consular district). In 1885 the production was 12,925,815 tons (of 2,200 pounds), a decrease of 585,181 tons as compared with 1884. In 1885, 57,662 laborers were employed in the mines, a decrease of 2,359 from 1884. The average selling price per ton of coal during the year 1885, was $1.71, being 14 cents less than in 1884. Since 1853 the price has not been as low as during 1885. The cost of production was $1.63 per ton, a reduction of 15 cents per ton from 1884, being 11 cents on the cost of labor and 4 cents on other expenses. This is the lowest cost price since 1853. The profits of the remunerative mines have decreased (from 1884) $16,103.06, while the deficits of the losing mines have decreased $174,099.34. The estimated profit per ton was 8⅓ cents in 1885, or 1½ more than in 1884.

Comparative table for the years 1884 *and* 1885.

Items.	1884.	1885.
Laborers:		
In the mines	60,021	57,662
On the surface	18,768	19,203
Total	78,789	76,865
Total wages paid	$14,859,041 59	$11,813,003 81
Average annual laborer's wages	175 82	153 63
Expenses:		
Ordinary	$22,285,660 40	$19,506 922 11
Extrordinary	1,819,161 00	1,460,204 21
Total expenses	24,104,821 46	20,973,126 32
Cost price per ton of coal:		
Wages	$1 02	$0 91
Expenses	76	72
Total	1 78	1 63
Total production ... tons	13,510,996	12,925,815
Total value of product	$23,927,999 03	$22,144,200 47
Average selling price per ton	$1 85	$1 71
Average profit per ton	$0 06¾	0 08⅓

The following statement shows the number of mines worked and not worked, number of laborers, production, and pecuniary results for 1885:

Number of mines:	
Worked	80
Not worked	45
Pits for ventilation	89
Pits of extraction:	
Worked	187
In reserve	62
In construction	11
Average depth of pits of extraction ... feet	1,762
Average width of coal veins	2
Laborers:	
In mines	57,662
On the surface	19,203
Total	76,865
Horses employed:	
In mines	2,774
On the surface	1,066
Total	3,840

Ordinary expenses	$19,506,922 11
Extraordinary expenses	$1,466,204 21
Total	21,073,126 32

Expenses for salaries and laborers	$11,813,005 81
Other expenses	$9,260,120,51
Total production:	
Quantity ... tons	12,925,815
Value	$22,144,200 47
Number of paying mines	42
Profit on same	$1,419,334 35
Number of unremunerative mines	39
Loss on same	$348,260 20
General profit of all mines	$1,071,074 15

The total number of laborers were subdivided as follows:

In mines:	
Men	45,551
Women	3,995
Boys (under 16 years of age)	6,534
Girls (under 16 years of age)	1,582
Total	57,662
On the surface:	
Men	12,543
Women	2,709
Boys (under 16 years of age)	2,113
Girls (under 16 years of age)	1,838
Total	19,203

The average daily wages for 1885 was as follows (avoiding fractions):

	Cents
Men	60
Women	32
Boys	27
Girls	21

The following are the annual average wages per laborer for the last ten years:

Years.	Amount.	Years.	Amount.
1876	$199 75	1881	$178 72
1877	160 77	1882	186 28
1878	161 85	1883	194 35
1879	165 30	1884*	175 82
1880	176 98	1885	153 [illegible]

During the same term of years, fortunately for the laborer, the prices of the necessaries of life have materially diminished. The following table will show the average price of wheat and potatoes, the two staple articles of consumption, since 1850:

Years.	Wheat, 220 pounds.	Potatoes, 220 pounds.	Years.	Wheat, 220 pounds.	Potatoes, 220 pounds.	Years.	Wheat, 220 pounds.	Potatoes, 220 pounds.
1850	$3 17	$0 80	1862	$6 18	$1 70	1874	$6 45	$1 77
1851	3 24	1 61	1863	5 26	1 14	1875	5 03	1 52
1852	3 98	1 62	1864	4 67	1 27	1876	5 36	2 18
1853	4 57	1 77	1865	4 61	1 38	1877	6 28	2 39
1854	5 97	2 31	1866	5 46	1 40	1878	5 64	2 18
1855	6 24	2 02	1867	7 18	2 12	1879	5 29	2 49
1856	5 83	1 62	1868	6 86	1 92	1880	5 48	2 27
1857	4 30	1 31	1869	5 36	1 30	1881	5 65	1 80
1858	4 55	1 18	1870	5 63	1 86	1882	5 23	1 84
1859	4 61	1 33	1871	7 09	1 90	1883	4 71	1 21
1860	5 90	1 89	1872	6 32	1 82	1884	4 20	1 34
1861	6 52	2 25	1873	6 67	1 72	1885	3 75	1 18

STONE AND MARBLE QUARRIES.

Number of quarries in the province of Hainaut (of which 445 are above ground and 88 under ground)	533
Number of laborers employed	11,280
Horses employed	714

Value of products.

Marble, stones for ornament, and building-stones	$1,061,242 34
Limestone	864,147 85
Paving-stone	389,477 86
Chalk, silex, clay, and sand	193,861 17
Sulphate of baryte	4,053 00
Phosphate of lime	614,068 10
Total	3,126,850 32

The following table gives the value of the productions of quarries in same province from 1880:

Years.	Value.	Years.	Value.
1880	$3,350,500 91	1883	$4,384,960 00
1881	3,718,680 26	1884	3,392,779 23
1882	4,034,070 56	1885	3,126,850 32

IRON INDUSTRY IN THE PROVINCE OF HAINAUT FOR 1885.

Establishments:	
Working	8
Shut down	8
Smelting furnaces:	
Working	14
Shut down	21
Steam machinery:	
Number	165
Horse-power	5,858
Laborers employed	1,341

Consumption.

	Tons (2,200 pounds).
Belgian mineral ore	26,900
Foreign mineral ore	766,410
Scoriæ	198,700
Fondant	102,970
Coke	398,810
Coal	5,669

Production.

Pig iron for rolling-mill purposes	348,520
Pig iron for foundries	7,960
Total	356,480

Aggregate value	$2,946,202 90

Comparative production and value from 1880 to 1885, inclusive.

Years.	Active smelting furnaces.	For rolling-mill purposes.		For foundry purposes.		Total product.	Average value per ton.
		Production.	Value per ton.	Production.	Value per ton.		
		Tons.		*Tons.*		*Tons.*	
1880	20	311,140	$11 04	36,695	$13 80	347,835	$11 34
1881	19	316,783	10 13	40,171	13 32	356,954	10 49
1882	20	362,088	10 39	40,050	14 00	402,138	10 75
1883	19	400,473	9 98	24,400	13 95	424,873	10 22
1884	18	381,000	8 65	13,300	13 06	394,300	8 99
1885	14	348,520	8 16	7,960	10 77	356,480	8 26

It will be seen by the following table how the depression in smelting furnaces has been accentuated since 1852:

Years.	Number of furnaces.	Product.	Value.	Value per ton.	Mineral employed.	Fuel.	Number of laborers.
		Tons.			*Tons.*	*Tons.*	
1852	18	85,210	$1,234,665 20	$14 50	256,183	116,689	1,310
1853	23	118,873	2,370,428 44	19 94	369,062	174,855	2,108
1854	28	148,063	3,440,302 20	23 22	487,900	231,352	2,204
1855	28	145,428	3,431,437 87	23 18	454,548	223,682	2,205
1856	29	158,032	3,476,080 54	22 00	493,425	240,455	2,287
1857	26	145,783	2,857,265 60	19 60	425,996	216,023	2,187
1858	26	163,910	2,945,436 11	17 97	488,759	241,322	2,419
1859	27	163,926	2,747,458 83	16 76	469,720	237,857	2,270
1860	25	183,910	2,976,027 19	16 18	507,250	242,600	2,282
1861	26	188,100	2,934,944 63	15 60	520,950	241,700	2,253
1862	25	208,750	3,279,856 85	15 61	581,511	262,840	2,443
1863	25	229,208	3,482,549 90	15 19	637,170	284,330	2,372
1864	27	268,960	4,137,562 60	15 42	742,600	327,700	2,783
1865	31	287,380	4,415,202 40	15 38	819,600	304,160	2,928
1866	31	313,400	4,948,845 50	15 82	852,200	375,300	2,998
1867	25	278,700	4,068,175 00	14 79	773,700	339,450	2,360
1868	24	287,735	3,924,908 54	13 64	816,650	350,236	2,387
1869	28	349,397	4,773,337 76	13 65	960,755	419,631	2,633
1870	28	357,758	5,017,289 00	14 02	1,000,775	453,892	2,648
1871	30	394,890	5,655,455 84	14 32	....	503,400	2,623
1872	33	435,490	8,039,422 72	18 46	....	572,700	3,042
1873	34	392,160	9,263,578 50	23 36	....	517,530	3,060
1874	24	336,600	5,577,600 00	16 57	....	410,210	2,458
1875	25	293,114	4,124,796 00	14 07	....	367,070	2,020
1876	15	236,723	2,888,250 79	12 20	....	270,660	1,640
1877	15	239,330	2,641,872 78	11 04	....	281,800	1,418
1878	15	265,357	2,676,697 70	10 18	....	304,900	1,426
1879	14	224,832	2,243,931 90	10 08	....	258,450	1,417
1880	20	347,835	3,945,969 92	11 34	....	371,260	1,820
1881	19	356,954	3,744,325 45	10 49	859,084	399,775	1,966
1882	20	402,138	4,322,235 00	10 75	996,973	455,780	2,043
1883	19	424,873	4,343,619 40	10 22	1,002,006	495,596	2,013
1884	18	394,300	3,468,403 00	8 80	864,350	442,095	1,600
1885	14	356,480	2,946,202 90	8 26	793,310	398,810	1,341

ROLLING-MILLS.

Working	24
Shut down	8
Number of laborers	8,389

Consumption.

	Tons (2,200 pounds).
Pig-iron	379,358
Other iron	352,821
Scrap-iron	62,196
Coal and fuel	581,883

Production.

Products.	Quantity.	Value.	Value per ton.
	Tons.		
Rails	4,868	$108,045 26	$22 19
Rolled steel	1,181	31,847 51	26 97
Other steel	9,463	182,635 90	19 30
Steel wire	4,393	114,459 61	26 03
Total	19,905	436,988 28	
Average			21 95

WINDOW-GLASS AND GLASSWARE WORKS, PROVINCE OF HAINAUT, 1885.

Establishments:	
Working	59
Shut down	7
Melting furnaces:	
Working	160
Not working	75
Pots:	
Working	1,163
Not working	504
Flattening-furnaces:	
Working	182
Not working	59
Laborers employed	8,322
Consumption of coal ... tons	584,721

Production.

Window-glass ... 29 meters	22,448,000
Value	$6,884,782 30
Bottles ... number	4,510,000
Value	$89,938 00
Other glassware ... value	$290,098 30

PLATE-GLASS WORKS.

Establishments, working	3
Melting furnaces:	
Working	6
Not working	3
Pots:	
Working	80
Not working	28
Flattening furnaces	98
Laborers employed	1,440
Consumption of coal ... tons	58,756

Production.

Plate-glass ... 29 meters	286,000
Value	$955,034

man with a loom able to produce the article in vogue will gain from 10 to 20 francs—about $2 to $4 per day—another with a loom producing a less stylish fabric will make but 2 or 3 francs—say from 40 to 60 cents per day. Till the year 1872 work was regular enough at St..Etienne. Economical workmen grew rich, and most of the houses in the city were built by them. Since then the condition of workmen has been less favorable, wages have been smaller, and many have been out of employment. The manufacturer, too, has suffered, and now that business has revived it is hard to find the skilled labor which is needed. The ribbon production of St. Etienne formerly amounted to 110,000,000 francs ($25,000,000) yearly; this included braids also, which are now principally manufactured at St. Chamond. To-day the combined production of St. Etienne and St. Chamond is estimated at not above 90,000,000 francs—say $18,000,000 yearly. Till the year 1872 two-thirds of the ribbons manufactured were for exportation. To-day those destined for exportation do not exceed one-third. It is alleged by the manufacturers that this great change is due to the policy of the United States in imposing such an enormous tariff upon their productions. It is stated by the president of the chamber of commerce that the exportation of ribbons to the United States formerly ran as high as 25,000,000 or 30,000,000 francs. If this be true, there is certainly a very great change from the past to the present figures.

From publications made by the "chamber of textiles," an approximate estimate has been made of the total ribbon production of St. Etienne for the years 1881, 1882, 1883. A table is hereto annexed and made a part of this report. This table shows that, unfortunate as was the year 1881 for the ribbon department, still the total valuation of the ribbon production for that year was 63,400,000 francs. This was 4,210,000 francs more than the production of 1882. I cannot give more accurately than I have the ribbon production of St. Etienne for the years 1884 and 1885. The only official figures for these years must be taken from the declared export tables from this consular district to the United States. From the table given below it will be seen that the total ribbon exportation to the United States for 1884 was $576,243.02, and for 1885 was $498,323.57, the decrease for 1885 being $77,919.45. The total exportation of ribbons to the United States for the year 1886 is $793,271.60, showing an increase of $294,948.03 over the year 1885. Thus it will be seen that there is a very decided improvement this year in the ribbon exports to the United States.

Articles.	1882.	1883.	1884.	1885.	1886.
Silk ribbons	$675,735 25	$307,109 02	$215,556 50	$316,965 51	$541,609 32
Velvet ribbons	105,182 05	771,160 34	282,517 47	113,341 61	157,511 68
Elastic ribbons	1,797 78	1,078 99	3,656 09	4,802 23	3,471 74
Cravats	13,143 40	2,758 50	....	....	....
Trimmings, &c	61,868 90	102,512 20	84,512 96	63,214 29	90,678 85
Total	857,727 38	1,185,218 75	576,243 02	498,323 57	793,271 60

METALLURGY.

In the report of my predecessor for the calendar year 1881 the condition of French metallurgy is stated to have been in that year exceptionally good. During the year 1882 its condition was still prosperous, notwithstanding the disastrous monetary crisis, which seriously affected every other branch of trade. The metallurgic industry, however, remained intact, and kept up firm and remunerative prices. The French by the state. Being under the apprehension that a repurchase of their roads by the state—provided in the different charters and warmly advocated by influential political parties—might be carried, they proceeded to apply for a revision of the old charters. In the mean time they restricted their orders to their most pressing needs, prudently conforming themselves to the marked decline in their receipts.

Besides this, the crisis, already bad enough, was aggravated by the competition of the large metallurgical establishments which had been erected at St. Nazaire, at Bayonne, and in other parts of the country. The new plants had raised the producing capacity of French metallurgy to 600,000 tons per year, while the home consumption did not exceed 250,000 or 300,000, leaving thereby on the hands of the manufacturer a surplus of at least 300,000 tons, which could not be sent abroad, save at prices almost ruinous. Thus was exportation, which means successful competition with England, Belgium, and Germany, rendered impossible. Under such circumstances, it is not to be wondered at that stocks accumulated and prices, from the beginning of 1883 to the close of the same year, went gradually but steadily down. Merchant iron, bars, plates, &c., decreased from 195 francs in January to 160 in December in the Paris markets. Bessemer steel rails were, in December, worth 160 francs, while in the flush times, before the crisis, 180 was the minimum price, and the cost price in the Loire district exceeded 160 francs. Hence further manufacturing of this article became impossible. To sum up, the year 1883 was characterized by overproduction and low prices, such as generally did not pay the producer, and feverish and uncertain trade. Furnaces had to be put out of blast in the north and Moselle région, as well as in the Loire district, and mills had to be stopped in order to check overproduce. Many workmen were dismissed, wages were reduced, and, as a matter of course, strikes followed, and up to the end of the year the crisis remained in full force. The total production of French metallurgy, foundry-iron, forge-iron, and steel included, amounted to—

	Tons.
1881	3,070,036
1882	3,570,296
1883	3,524,500
1884	2,759,318

showing at the end of 1882 an increase of 500,260, and at the close of 1883 a decrease of 45,796 tons, leaving to the year 1883 an excess of production over 1881 of 454,464 tons.

The following figures show to what degree the metallurgical portion of this district—the departments of the Loire and the Isère—took part in the general production. Participating with 299,949 tons in a total production of 3,524,500, the two departments represented in 1883 about 8½ per cent. of the general output, while in 1881 they shared in it with a little more than 10 per cent. It may not be amiss to add that some orders given in July, 1883, to works in the Loire region by the war and marine department greatly aided the district and helped to keep up its activity. This region still maintains its supremacy in finished products, especially in war and marine materials. It stands at the head of all the French metallurgical districts in the production of steel, and although the manufacturing of steel rails no longer pays and must be abandoned, still its steel may be destined to bring relief to its metallurgical interests, as, to all appearances, it is to the steel that belongs the coming age.

industry, 1882 and 1883, was about half a million of tons larger than in 1881, in consequence of which the demand for the universal fuel increased proportionably. A statistical table published in the *Écho des Mines*, by Mr. F. Laur, gives the quantity of coal mined in the Loire region as amounting to 3,620,550 tons for 1882, and to 3,651,860 tons for 1883. It may be said, therefore, that, as to the quantity of coal mined, these years cannot be accounted unsuccessful, yet the general calamity brought on by the financial and industrial crisis in metallurgy had a damaging effect upon mining interests, resulting in the retrenchment of wages of employés. The following table shows the production of coal in this consular district for the year 1884:

Consular district.	Tons.	Value.
		0 80
Department of the Loire	3,152,184	$9,573,428 00
Department of Isère	158,494	31,69

The following will show the production of coal in the department of the Loire for the respective years:

	Tons.
1881	3,479,356
1882	3,568,909
1883	3,586,802
1884	3,152,184

The decrease for the year 1884 from 1883 being 499,676 tons.

The following translation of an extract from the *Écho des Mines* by Mr. F. Laur, engineer of mines, is interesting for the information contained in it on the subject of mines and metallurgy.

Output of coal from the basin of the Loire in 1883.

[Result of semi-annual reports of our five principal companies in 1883.]

	Tons.
Firminy and Roche-la-Molière	585,444
Montrambert-Beraudière and Montcel	591,675
Loire	460,998
Mines of St. Etienne	577,110
Rive-de-Gier companies	204,932
Total output from the basin of St. Etienne	3,110,910
Rive-de-Gier	488,143
Total	3,599,053
The total output had been St. Etienne	3,055,718
Rive-de-Gier	513,191
Total	3,568,909

The output, then, of 1883 exceeded that of 1882 by about 30,000 tons.

The *Écho* gives the production of the two basins of the Nord and of the Pas-de-Calais, making together 10,051,459 tons.

On the metallurgic production of the Loire we have interesting figures. From official statistics we could not get so much in six months.

The production of the Loire in 1883, compared with that of 1882, is the following:

Products.	1882.	1883.
	Tons.	*Tons.*
Ore	58,547	63,396
Iron	84,290	73,768
Steel	133,405	118,290
Total	276,242	254,454

As can be seen, there is a decrease of 25,000 tons in the manufactured article, iron and steel about 10 per cent. If the ore has suffered a diminution of only 4,000 tons, it is because there must have been introduced into the department foreign ore, which is again a bad symptom.

THE METALLURGICAL PRODUCTION IN AMERICA.

The condition of metallurgy in America is analogous to that in Europe. In 1883, if the production was not diminished, the prices, on the other hand, were sensibly lowered. Many owners of foundries put out their fires because the future promised no more remunerative prices. The year 1883 produced, in round numbers, 4,948,000 tons of ore; in 1882, the yield had been 4,623,000, say an increase of 325,000 tons. The production of steel rails in 1883 was inferior, by 100,000 tons, to that of the preceding year. To sum up, it is to be seen that our neighbors, the American iron-men, cannot congratulate themselves more than their European brethren on the results of 1883. On the other side of the Atlantic they allege excess of production as the principal cause of this state of things. It is the same on this side. Metallurgy realizes, to some extent, Pharaoh's dream of seven fat kine always followed by seven lean kine; the number seven varies, but the succession of the kine remains invariable.

For any information about the glove business of Grenoble, the lace industry of Le Puy, the cotton goods of Terare, the "Chartreuse" of Voiron, and the glass manufactories of St. Just, I have to rely exclusively on the table of declared exports, herewith inclosed, being left absolutely without any other statistical information.

DANIEL COLEMAN,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
St. Etienne, January 1, 1887.

A.—*Total ribbon production of St. Etienne during the years* 1881, 1882, 1883.

Products.	1881.	1882.	1883.
	Francs.	*Francs.*	*Francs.*
Pure silk, black	....	10,000,000	9,000,000
Pure velvet, one color	....	15,000,000	16,000,000
Pure silk, figured	30,300,000	3,600,000	1,600,000
Silk and cotton mixed:			
Black	....	2,130,000	2,550,000
One color	....	5,200,000	10,200,000
Figured	12,200,000	3,000,000	2,500,000
Velvet:			
Pure silk	200,000	200,000	1,000,000
Silk and cotton mixed	2,400,000	4,000,000	15,000,000
Cravats:			
Pure silk	2,600,000	1,350,000	1,000,000
Silk and cotton mixed	1,700,000	3,000,000	1,600,000
Trimmings, braids, fringes, &c	5,000,000	2,330,000	700,000
Hat ribbons	4,000,000	3,400,000	3,500,000
Elastic ribbons	5,000,000	5,000,000	4,000,000
Total	63,400,000	50,210,000	68,650,000

GERMANY.

Report of Consul-General Raine, of Berlin.

The universal complaint of German trade and industry in 1885 was caused less by stagnation and decline of business than by low and unprofitable prices. It will appear from the subjoined comparative table that the commercial balance against Germany in 1885 was higher by about $14,000,000 than in 1884, while the year 1883, showing the largest amount of exports, closed with an excess of about $3,000,000 exports over imports. Official returns give the following figures of Germany's special commerce (exclusive of goods in transit) in the last fourteen years:

Years.	Imported.	Exported.	Years.	Imported.	Exported.
1872	$825,498,000	$586,574,000	1879	$926,534,000	$671,160,000
1873	1,013,666,000	592,620,000	1880	913,920,000	723,520,000
1874	874,174,000	590,046,000	1881	871,080,000	709,240,000
1875	851,295,000	605,820,000	1882	744,940,000	750,220,000
1876	931,365,000	606,750,000	1883	775,880,000	778,260,000
1877	947,240,000	657,451,000	1884	781,830,000	778,022,000
1878	885,905,000	640,220,000	1885	711,620,000	693,770,000

GERMANY'S INDUSTRIAL PROGRESS DURING THE LATTER HALF OF THE CENTURY.

A comparison of the state of industry twenty-five years ago with that of the present time is quite instructive. Taking standard conditions as 100, the upward tendency will be seen by the figures, put in juxtaposition, for the latest years reported:

	Standard conditions and proportionate increase.	
Population	100 in 1860 :	124.1 in 1885
Output of coal	100 in 1861 :	412.5 in 1885
Pig-iron produced	100 in 1861 :	617.1 in 1885
Sugar produced	100 in 1871–72:	602.3 in 1884-'85
Beer produced	100 in 1872 :	152.8 in 1884-'85
Total imports for home consumption	100 in 1872 :	131.2 in 1884
Exports	100 in 1872 :	190.7 in 1884
Length of railroads	100 in 1868 :	214.3 in 1883
Number of post-offices	100 in 1874 :	167.9 in 1883
Number of telegraph offices	100 in 1874 :	225.4 in 1883
Goods traffic on large rivers and canals	100 in 1860 :	370.0 in 1884
Sea trade in German ports	100 in 1874 :	181.0 in 1884
Pig-iron consumed	100 in 1872 :	155.6 in 1884
Coal consumed	100 in 1872 :	177.5 in 1884
Petroleum consumed	100 in 1866 :	141.8 in 1884
Cotton consumed	100 in 1866 :	346.6 in 1884
Jute consumed	100 in 1866 :	3276.7 in 1884
Chili saltpeter consumed	100 in 1872 :	624,0 in 1884

Though, to judge from the figures first above given, it must be granted that, generally speaking, a great change, beginning 1872, has taken place, viz., decreased imports and increased exports. It will be observed that 1885 shows a sudden decline by $84,000,000 as compared with exports in 1884.

The causes of this decline may be attributable partly to the appearance of the cholera last year both in Italy and Spain, where stringent preventive measures were taken, which materially affected importation.

Another cause consisted in the unfavorable economical condition of France, England, the United States, and of large portions of South America; while Russia's almost prohibitive rates of duty did not foster the importation of German articles. But the principal cause of the decrease of imports by 316.4 million marks ($75,400,000) and of exports by 344.7 millions ($82,000,000) in value during the year 1885 as against 1884 must be ascribed to the steady decline of prices both of raw material and manufactured articles.

A.—*Average wholesale prices of chief articles in the German Empire during the years* 1880–1885 *and in the month of August*, 1886.

Articles, measures, and names of market.	1880.	1881.	1882.	1883.	1884.	1885.	August, 1886.
Wheat (per 1000 kilograms = 22 cwt.):							
Berlin, good quality	$51.8	$52.2	$48.5	$44.3	$38.5	$38.8	$37.24
Dantzic (province of West Prussia)	49.9	50.1	46.7	43.4	37.4	34.1	83.45
Cologne-on-the-Rhine	55.7	56.3	54.0	48.5	42.8	41.3	40.81
Lindau (Bavaria)	62.1	61.5	57.5	54.2	49.9	46.6	49.20
Rye (per 1,000 kilograms = 22 cwt.):							
Berlin, good quality	44.7	46.4	36.2	34.4	34.1	33.4	30.50
Dantzic	43.1	44.8	33.6	32.4	33.0	81.2	27.84
Cologne	48.6	51.8	42.4	37.8	36.4	35.9	38.76
Lindau (Hungarian rye)	50.3	52.3	45.7	42.5	43.5	42.3	39.86
Barley (per 1,000 kilograms = 22 cwt.):							
Dantzic	37.0	36.2	31.3	31.5	32.9	81.5	28.09
Lindau	50.4	50.7	46.5	44.5	45.3	42.5	41.41
Magdeburg	46.2	44.6	43.1	39.5	41.9	37.9	35.12
Munich	45.3	45.5	44.4	40.5	42.3	38.6	38.67
Oats (per 1,000 kilograms = 22 cwt.):							
Berlin	35.2	35.8	31.5	30.5	31.2	31.9	29.11
Dantzic	35.3	37.4	29.9	30.2	31.3	31.8	29.50
Cologne	36.3	39.5	37.0	34.7	34.3	33.9	32.87
Lindau	36.7	37.8	39.3	32.4	35.7	35.7	35.10
Potato-spirits (per 10,000 liter = 2,200 gallons):							
Berlin	14.4	13.0	11.6	12.7	11.3	9.9	9.2
Mannheim (Baden)	16.8	15.5	13.1	13.9	12.1	10.4	8.8
Posen	13.8	12.6	11.2	12.2	11.0	9.6	8.9
Sugar (per 100 kilograms = 2.2 cwt.):							
(*a*) Raw sugar:							
Cologne, light grain, 96 per cent. polarization, exclusive of sacks	15.8	16.1	15.8	14.8	11.7	11.9	10.3
Magdeburg, first quality, 96 per cent. polarization, exclusive of sacks	15.2	15.6	15.2	14.3	11.1	11.2	9.8
(*b*) Sugar refined:							
Cologne	19.2	19.8	19.5	18.2	14.0	14.9	13.0
Magdeburg, first quality, in loaves	18.7	19.2	19.1	17.7	14.6	14.1	12.6
Coffee (per 100 kilograms = 2.2 cwt.):							
Bremen (Rio) good ordinary	30.2	24.8	19.7	19.6	22.3	19.4	21.5
Frankfort-on-the-Main (Java) good, ordinary	44.0	41.8	35.0	37.4	36.6	33.6	35.0
Hamburg (Santos)	30.9	25.0	19.8	21.6	22.3	19.3	22.5
Mannheim (Ceylon) good middle quality	58.2	55.7	52.4	52.2	49.7	47.6	49.9
Rice (per 100 kilograms = 2.2 cwt):							
Bremen (Rangoon) peeled, best quality	6.3	6.1	5.1	5.1	5.1	4.9	5.0
Hamburg (Rangoon) lowest quotation	5.9	5.4	4.5	4.7	4.7	4.4	6.1
Herrings (each cask, at 150 kilograms):							
Stettin:							
Crown matties, including casks	9.7	7.3	8.1	9.5	7.9	7.4	7.4
Scottish matties, including casks	8.1	7.2	7.9	8.4	6.8	7.9	8.5
Tobacco, manufactured (per 100 kilograms = 22 cwt.):							
Bremen:							
Kentucky, ordinary, including packing	12.4	14.0	15.0	15.7	19.6	17.9	10.7
Brazil, second quality	21.8	21.0	19.3	21.1	19.7	18.9	23.8
Hamburg:							
Domingo	26.4	26.9	26.3	23.2	23.8	23.6	23.3
Brazil	27.3	27.3	26.7	26.1	25.7	23.0	23.3
Cotton (100 kilograms = 2.2 cwt.):							
Bremen, good fair, Oomra	26.1	22.5	22.2	19.0	22.4	22.0	19.0
Hamburg (New Orleans) middling	31.6	29.4	30.5	25.9	27.2	26.3	23.3
Wool (per 100 kilograms = 2.2 cwt.):							
Berlin, North German	79.7	79.1	78.5	78.5	75.0	63.7	71.4
Bremen, washed, Buenos Ayres	114.3	104.9	101.8	99.9	95.5	81.8	99.8

A.—*Average wholesale prices of chief articles in the German Empire, &c.*—Continued.

Articles, measures, and names of market.	1880.	1881.	1882.	1883.	1884.	1885.	August, 1886.
Pig-iron (per 1,000 kilograms = 22 cwt.):							
Berlin, from the store:							
Best Scottish cast iron, No. 1	$20.7	$19.4	$19.9	$19.6	$17.8	$16.0	$15.2
English (Middleborough), No. 3	16.9	15.5	16.0	15.0	13.9	12.7	11.9
Breslau, at the works:							
Puddling-iron	15.9	13.3	15.7	13.2	12.9	11.5	9.4
Foundry-iron	17.4	14.8	16.5	15.1	14.3	13.4	11.6
Dortmund, at the works:							
Bessemer crude iron	18.7	16.5	16.7	14.4	12.6	10.9	9.9
Westphalian puddling-iron	16.3	13.6	15.4	13.7	12.0	10.5	9.5
Dusseldorf, at the works:							
Best German puddling-iron	19.8	14.0	15.3	13.7	11.9	10.6	9.7
Best German foundry-iron	20.7	17.4	17.8	17.4	15.0	13.9	11.6
Lead (per 100 kilograms = 2.2 cwt.):							
Berlin	7.9	7.4	7.1	6.4	5.5	5.0	6.3
Halberstadt, refined, soft, at the works	....	....	6.4	5.7	4.9	5.1	5.6
Cologne, double refined, soft	7.6	6.9	6.7	5.9	5.1	5.3	6.1
Copper, (per 100 kilograms = 2.2 cwt.):							
Berlin	35.5	33.4	34.9	33.6	29.9	25.3	21.2
Hamburg, English, in blocks	33.5	32.4	35.7	33.5	30.0	23.2	20.0
Zinc (per 100 kilograms = 2.2 cwt.):							
Breslau	8.0	7.3	7.5	6.9	6.5	6.2	6.1
Cologne	9.0	7.3	8.1	7.3	6.9	6.7	6.5
Tin (per 100 kilograms = 2.2 cwt.):							
Hamburg	45.0	47.8	54.0	49.7	44.0	46.9	52.5
Petroleum (per 100 kilograms = 2.2 cwt. with barrel):							
Bremen, American white refined	4.1	3.8	3.4	3.7	3.6	3.5	2.9
Stettin, American white R. P	4.4	4.1	3.6	4.0	3.9	3.7	5.1
Pit coal (per 1,000 kilograms = 22 cwt.):							
Breslau:							
Nether Silesian for gar	2.4	2.4	2.4	2.3	2,3	2.3	2.3
Upper Silesian for gar	1.5	1.5	1.4	1.4	1.4	1.3	1.3
Dantzic, delivered on board:							
Double sifted nut coal, English	3.1	3.3	3.2	3.1	3.1	2.9	2.8
Scottish, machine coal, lump coal	3.2	3.5	3.1	3.0	3.1	2.8	2.6
Dortmund, at the pits:							
Lump coal, for export	2.0	1.9	1.8	1.7	1.7	1.7	1.5
Puddling-coal, good quality	1.4	1.2	1.2	1.4	1.4	1.2	1.0
Saarbruck, open-burning coal	....	....	1.9	1.9	1.9	1.9	1.8

Many manufacturers carried on their business with a profit next to nothing, and, in numerous instances, for the mere purpose of retainiing, in anticipation of better times, skillful laborers, who, if dismissed, would go to fill the ranks of dreaded competitors.

In 1886, however, signs of a revival of business were noticed, and prices show towards the end of 1886 a considerable rise, as compared with prices in June last, especially in metals, cotton, hemp, wool, silk, and flax, while cereals declined.

Exporters stated to me that consumption of stock had given the first incentive to trade in many instances. But in my opinion there can be no doubt that a brisk exportation set in when the United States sent large orders in consequence of the strikes and labor disturbances then prevaliing at home.

According to consular reports the German Empire exported to the United States in the year ending September, 1886, $76,588,045.18, as against $59,768,743.79 in 1885, making a total increase of $16,819,801.39 in 1886, the largest amount thus far reported in any one year.

B^a.—*Value of declared exports from the consular district of Berlin to the United States during the four quarters of the year ending September* 30, 1886.

Articles.	Fourth quarter, 1885.	First quarter, 1886.	Second quarter, 1886.	Third quarter, 1886.	Total.
Albums	$61,036 54	$32,365 85	$142,971 09	$328,546 65	$564,940 13
Amber		778 42	788 98	500 99	2,068 39
Animals (oxen)	1,025 78				1,025 78
Art, works of			1,395 63	3,668 67	5,064 30
Artificial flowers	2,685 72	3,132 17	764 69	984 19	7,566 77
Baskets, cane ware	534 07	352 78	655 69	5,318 71	6,861 25
Books	2,917 95	3,489 53	6,659 75	4,838 34	17,905 57
Bristles, brushes, horse hair	2,013 44	6,716 40	7,160 39	11,452 83	27,343 06
Buttons:					
Glass, metal, wooden	10,515 33	25,937 00	19,749 66	25,166 14	81,368 13
Vegetable ivory	5,928 65	6,549 23	9,852 00	7,178 32	29,508 20
Chemicals, drugs, dyes, ink	63,988 91	35,510 25	48,145 21	55,768 48	203,412 85
Chromos	2,847 22	4,463 83	5,524 99	1,664 53	14,500 57
Colors	26,885 67	11,541 97	12,883 70	7,967 91	59,279 25
Colors, aniline		22,295 07	22,788 97	19,099 16	64,283 20
Dress and piece goods:					
Cotton and cotton mixed goods	4,807 00	523 18	8,787 50	5,103 76	19,221 44
Linen and linen mixed goods	5,963 68	9,277 47	2,809,83	1,044 70	19,095 68
Silk and silk mixed goods	1,180 90	2,891 19	3,259 36	1,616 43	8,947 88
Velvet and plush goods	35,216 86	82,502 24	245,146 24	205,638 76	568,504 10
Woolen and woolen mixed goods	66,771 95	78,825 61	204,502 40	186,913 54	537,013 50
Earthen ware	2,243 71		836 66	666 56	3,746 93
Embroideries, crochet covers	20,800 58	32,026 70	10,661 14	13,299 09	76,787 51
Engravings	5,633 87	8,855 90	7,512 97	10,267 91	32,270 65
Fancy feathers	6,048 16	4,254 65	35,035 22	41,090 23	87,328 26
Fancy goods, notions, toys	6,877 45	7,267 82	7,789 70	67,522 27	89,457 24
Feather trmmings	9,522 47	676 07	1,686 70	1,384 15	13,269 39
Furniture	1,348 62	1,044 82	73 98	4,148 00	6,615 42
Furs, articles made of			9,013 70	15,411 52	24,425 22
Gas-burners			936 70	728 04	1,664 74
Glass, manufactures of	2,742 07	645 83	5,305 53	6,498 73	15,192 16
Glucose and dextrine	8,492 55	14,596 96	8,888 26	4,885 30	36,863 07
Gutta percha shields	218 81	660 24	522 38	236 24	1,637 67
Household effects		238 00	1,594 60	81 41	1,914 01
India-rubber goods	78 30		1,209 69	2,052 05	3,340 04
Instruments, musical:					
Accordeons, &c	10,778 94	18,521 70	15,381 79	15,692 64	60,375 07
Pianos and pianinos	8,254 48	7,742 92	4,524 92	8,637 61	29,159 93
Instruments, scientific	4,707 49	4,168 90	2,840 02	8,455 54	20,171 95
Ivory piano-keys			1,474 17	3,677 86	5,152 03
Jewelry			116 00		116 00
Jute bagging			2,348 30	2,588 98	4,937 28
Lanoline			1,405 96	773 42	2,179 38
Leather:					
Gloves and glove leather	69,581 03	86,166 92	55,953 50	108,897 10	320,598 55
Manufactures of	8,904 14	6,681 70	18,776 78	16,432 99	50,795 62
Liquors, malt and distilled	6,101 65	7,554 43	12,668 42	9,258 72	35,583 21
Lithographs	562 38	840 47	42 90	665 90	2,111 65
Machines			907 38	1,323 16	2,230 54
Metal:					
Manufactures of	35,564 41	12,189 33	13,673 70	23,426 66	84,854 10
Brass, bronze, and spelter goods	11,873 91	8,379 93	7,763 74	46,885 73	74,903 31
Cuivre poli articles	2,016 26	963 66	1,048 22	2,613 72	6,641 80
Zinc goods	3,038 09	11,152 25	9,439 28	66,742 81	90,372 43
Minerals	107 10		371 40	367 07	845 57
Mother-of-pearl			1,164 68	514 46	1,679 14
Mouldings, gilded	499 19	271 56			770 75
Oil paintings	28,437 54	247 12	3,451 00	21,803 18	53,938 84
Oleographs	2,899 36	1,898 76	1,718 85	46,108 81	52,625 78
Paper:					
Fancy	40,705 38	29,809 27	29,396 79	66,724 98	166,636 42
Manufactures of	25,063 55	15,068 30	26,014 16	31,604 97	97,780 98
Photographs	3,372 64	1,641 97	2,364 39	2,154 56	9,533 56
Plants	758 83				758 88
Porcelain ware	1,618 13	775 26	463 63	16,097 26	18,954 28
Rags, waste paper	4,579 50	16,054 09	37,805 89	32,741 53	91,181 01
Ready-made clothing	5,424 37	27,360 24	99,504 43	57,332 79	189,621 83
Cloaks, woolen, &c	65,676 90	141,652 60	130.067 88	442,832 41	780,229 79
Jerseys	9,306 98	195,232 60	52,806 66	30,151 04	287,497 28
Shawls	7,630 44	42,999 47	4,940 95	16,150 80	71,721 66
Rennets	5,369 63	11,929 20	11,280 30	3.146 36	31,725 49
Silver, articles made of			754 62	114 24	868 86
Size for painters		857 14			857 14
Statuaries		32 36			32 36
Sugar, capillary	3,583 44				3,583 44
Sundries	49,643 91	20,095 89	81,744 10	51,551 49	203,035 39

B^a.—*Value of declared exports from the consular district of Berlin, &c.*—Continued.

Articles.	Fourth quarter, 1885.	First quarter, 1886.	Second quarter, 1886.	Third quarter, 1886.	Total.
Theater apparatuses	$286 79	....	....	....	$286 79
Trimmings	6,188 17	$30,468 28	$17,097 89	$29,735 37	83,489 71
Wines	822 58	398 59	....	196 64	1,417 91
Wood, manufactures of	2,985 64	2,770 08	1,033 88	1,792 42	9,181 52
Yarn, woolen and worsted.....	27,341 33	37,538 09	36,466 25	22,676 78	124,022 55
Total for year ending September 30, 1886.....	811,960 50	1,138,952 36	1,523,355 74	2,230,613 60	5,704,882 20
Total for year ending September 30, 1885.....	867,307 17	961,859 80	1,051,692 85	1,703,901 14	4,584,760 96
Increase......................	....	177,092 56	471,662 89	526,712 46	1,120,121 24
Decrease	55,346 67	....	....	....	....

B^b.—*Value of declared exports from the district of the consulate-general at Berlin, including the districts of the consulates at Annaberg, Berlin, Bremen, Breslau, Brunswick, Chemnitz, Dresden, Hamburg, Leipsic, and Stettin, during the four quarters of the year ending September 30, 1886.*

Articles.	Annaberg.	Berlin.	Bremen.*	Breslau.	Brunswick.	Chemnitz.	Dresden.	Hamburg.*	Leipsic.	Stettin.	Total.
Albumen and yelks of eggs							$21,473 97	$26,747 58			$48,221 55
Albums		$564,940 13									564,940 13
Amber, manufactures of		2,068 39								$14,744 95	16,813 34
Animals, domestic, wild, birds		1,025 78	$12,549 14		$21,698 71			5,683 92		1,785 00	42,742 55
Art, works of		5,064 80									5,064 80
Basket and cane ware, whips, sticks, etc		6,861 25	48,717 11		10,392 25	$335 71		189,515 29			255,821 61
Beet sugar, grape sugar, glucose		8,588 44	258,078 63	$355,441 33	3,967,002 74			2,922,496 68		022,800 32	8,029,403 14
Books, music		17,905 57	17,064 83	737 26	15,072 54	2,549 90	43,570 80	16,593 29	$433,193 33		546,687 52
Bristles, feathers, horse hair	$5,324 46	27,343 06			1,776 62			331,446 85	276,154 79	77,685 47	719,731 25
Hair, human; braids			9,170 14					36,108 36			45,278 50
Buttons	64,226 63	81,368 13			25,162 02	1,511 29	11,675 44				183,943 51
Carpets					8,043 46						8,043 46
Chemicals, drugs, dyes, ink, &c		205,592 23	227,254 16		306,093 16	22,373 60	63,252 61	196,744 29	164,641 56	5,294 20	1,191,245 81
Dextrine		36,863 07		1,004 17				63,068 10		43,648 00	144,583 34
China ware, porcelain		18,954 28	155,821 64	54,603 89	16,780 31	346 90		54,706 94	44,545 53	4,130 02	349,889 51
Chromos		14,500 57		3,547 92					41,765 82		60,814 31
Clothes, ready-made		969,851 62				38,643 05					1,008,494 67
Jerseys, Jersey cloth		287,497 28				14,763 69					302,260 97
Colors	1,319 90	123,562 45			575 44				31,139 74	3,654 15	160,251 68
Chicory and coffee					40,337 52			149,469 71		1,041 00	190,848 23
Dress and piece goods, damasks						1,193,772 83					1,193,772 83
Cotton and cotton mixed goods		19,221 44				135,414 79		78,335 98			232,972 21
Linen and linen mixed goods		19,095 68		523,246 61	691 29	38,012 12	365,106 64	41,393 20			987,545 57
Silk and silk mixed goods		8,947 88		98,443 82				10,288 60			117,680 30
Velvets, velveteens, and plush goods		568,504 10			15,830 08	774 67					585,108 85
Woolen and woolen mixed goods		537,013 50		50,923 57	3,282 18	97,631 66	205,530 23	120,517 22	1,219,536 15		2,234,434 51
Woolen shawls		71,721 66									71,721 66
Dry goods			116,980 40								116,980 40
Dress shields of gutta-percha		1,637 67									1,637 67
Earthenware		3,746 93		12,576 83							16,323 76
Ebony								14,008 13			14,008 13

* Exclusive of American petroleum barrels re-exported.

B^b.—*Value of declared exports from the district of the consulate-general at Berlin, &c.*—Continued.

Articles.	Annaberg.	Berlin.	Bremen*.	Breslau.	Brunswick.	Chemnitz.	Dresden.	Hamburg.*	Leipsic.	Stettin.	Total.
Embroideries	$38,387 02	$76,787 51				$625,807 12					$740,981 65
Engravings		32,270 65									32,270 65
Fancy feathers in trimming		100,597 65									100,597 65
Flowers, artificial		7,566 77					$4,228 55				11,795 32
Fancy goods, notions, toys	26,667 46	91,136 38		$11,782 60	$167,460 30	44,498 70	30,631 45	$41,512 67			419,695 56
Fruits, dried, preserves					10,507 13			53,594 96			64,102 09
Fruit juice				18,589 97						$15,405 27	33,995 24
Furs		24,425 22							$969,709 66		994,134 88
Gas-burners		1,664 74									1,664 74
Glassware †		15,192 16		14,610 70		206 61	341,970 40				371,979 87
Gloves:											
Cotton, silk, and wool						1,780,205 06			39,982 55		1,820,187 61
Leather	199,082 27	320,598 85		234,966 15	221,783 04			156,959 77	301,828 97		1,525,218 75
Glove leather				52,338 04							52,338 04
Glue, gelatine, gold size		857 14		1,358 83	12,813 16					2,480 68	17,509 81
Grain, plants, and seeds		758 88	$32,995 61					487,826 90		41,030 63	562,621 02
Hemp and hemp bags					2,011 39					193,070 17	195,081 56
Hides, skins				413 17	7,095 17			407,327 50		2,923 95	417,759 79
Hosiery					20,543 50	5,374,472 72					5,395,016 22
Household effects		8,529 43				16,982 78					25,512 21
Jewelry, silver ornaments, &c		984 86						39,813 87			40,798 73
India-rubber goods		3,340 04			56,027 27			347,570 53			406,937 84
Instruments, musical:											
Accordeons	705,042 38	60,375 07			52,966 64	124,570 14	18,006 25	37,789 40	189,049 20		1,187,799 08
Pianos		34,311 96									34,311 96
Instruments, scientific		20,171 95	24,806 47		12,578 95						57,557 37
Ivory and ivory goods								101,461 49			101,461 49
Jute goods		4,937 28									4,937 28
Laces, trimmings, &c	1,057,993 49	83,489 71				9,377 21	10,847 59		162,924 21		1,324,632 21
Leather, manufactures of		50,795 61						27,018 78			77,814 39
Liquors, malt and distilled		35,583 22	726,861 34		52,305 82	120 69		202,709 87		1,100 00	1,018,680 94
Lithographs		2,111 65									2,111 65
Manuring salt, kainit					697,950 10			675,206 34			1,373,156 44
Machinery		2,230 54			50,701 43	10,053 32			35,031 32		98,016 61
Metals:											
Old										122,981 68	122,981 68
Manufactures of		166,399 27	66,788 51	2,665 71				73,293 81			309,147 30
Minerals		845 57									845 57
Moldings, gilded		770 75									770 75
Mufflers, shawls						160,322 86					160,322 86
Oil paintings		53,938 84			2,255 05		3,938 78				60,132 67
Oleographs		52,625 78									52,625 78

Paper:											
Fancy		166,636 42									166,636 42
Manufactures of		97,780 98			8,022 96		37,066 59	132,362 05		452 85	276,284 93
Portland cement					122,995 10			298,549 49		78,004 32	499,548 91
Photographs and photographic paper		9,533 56					221,831 02				231,364 58
Provisions, canned meat, fish, &c			679,551 35					41,082 46		4,397 12	725,030 93
Herrings								136,619 02			136,619 02
Rags, waste paper		91,181 01	27,800 31		97,027 78		17,544 72	406,829 48		395,173 65	1,035,556 95
Rape oil										16,469 77	16,469 77
Rennets, guts, bladder		31,725 49		1,011 38				25,458 39			68,195 26
Statuaries		32 36									32 36
Straw hats, plaits, &c							3,081 85				3,081 85
Theater outfits		286 79									286 79
Tobacco and cigars			126,039 09				14,300 95	29,161 17			169,501 21
Vegetable ivory buttons		29,508 20									29,508 20
Wax candles					490 83						490 83
Watch movements							176 60				176 60
Wines ‡		1,417 91									1,417 91
Wood articles		9,181 52								38,169 64	47,351 16
Wool					13,755 52						13,755 52
Woolen yarns, dyed		124,022 55			6,911 66	82,086 63					213,020 84
Zinc and spelter		90,372 43		83,219 58				1,429 06		13,976 91	188,997 98
Sundries	20,286 71	203,035 39	44,379 06	8,756,19	21,166 32	71,597 97	35,875 87	36,770 16	118,763 70	6,880 41	567,011 87
Total for the year ending September 30, 1886	2,118,330 32	5,704,882 20	2,574,857 70	1,530,237 75	5,917,113 41	9,846,432 02	1,456,210 31	8,027,561 31	4,118,266 62	1,707,308 66	43,054,200 42
Total for the year ending September 30, 1885	1,348,303 00	4,584,760 96	1,912,023 70	1,416,512 10	4,203,094 31	8,045,584 82	1,067,164 89	5,999,306 27	3,288,386 66	1,176,687 94	33,041,824 65
Increase in 1886	771,007 00	1,120,121 24	662,834 09	113,725 65	1,767,019 13	1,800,847 20	389,045 42	2,028,255 04	829,879 96	530,620 72	10,012,375 77

* Exclusive of American petroleum barrels re-exported. † Dresden includes also porcelain. ‡ Bremen includes also beer, liquors, &c.

Total for the year ending September 30—

1884	$36,245,934 96
1883	33,363,691 77
1882	33,481,219 95
1881	25,896,008 13
1880	27,035,045 03
1879	15,526,393 86
1878	13,516,088 97
1877	13,803,899 81
1876	12,127,988 66
Increase in eleven years	30,926,211 76

The following table shows in what articles Germany's total exports to all foreign countries in 1886 (first nine months) exceeded the figures reported for same period in 1885:

D.—*German imports and exports of some of the chief articles during the first nine months (January* 1 *to September* 30) *of the calendar years* 1886 *and* 1885.

Articles.	Imports.		Exports.	
	1886.	1885.	1886.	1885.
Pig, scrap, loop, and waste iron .... *tons..	117,600	162,222	246,636	190,530
Manufactures of iron .... do...	31,626	35,582	627,678	558,320
Cotton .... do...	134,016	119,850	8,400	6,937
Cotton yarn .... do...	16,699	15,772	5,488	5,485
Cotton goods .... do...	1,053	1,186	20,231	17,849
Raw sheep's wool .... do...	92,518	82,061	10,417	7,652
Woolen yarn .... do...	15,063	14,938	4,910	3,934
Woolen goods .... do...	1,265	1,244	21,469	19,596
Silk .... do...	2,702	2,262	712	692
Silk and half silk goods .... do...	381	398	4,454	3,594
Linen and jute yarn and thread .... do...	10,250	12,285	2,514	1,871
Linen and jute goods .... do...	1,664	4,433	5,412	5,223
Leather .... do ..	5,192	5,493	5,338	5,209
Leather goods .... do...	600	600	4,500	4,095
Wood (rough, cut, and raw) .... do...	1,231,023	2,446,764	380,932	431,569
Wood articles .... do...	8,953	9,438	23,783	20,489
Wheat .... do...	219,200	509,685	378,800	611,371
Rye .... do...	378,806	610,371	2,463	2,892
Oats .... do...	65,958	183,100	12,083	7,181
Barley .... do...	212,446	302,255	17,698	13,114
Pulse .... do...	19,894	33,062	9,712	5,861
Rape and lin seed .... do...	67,452	89,619	13,645	15,109
Potatoes .... do...	21,859	37,542	98,486	64,132
Flour, starch, peeled barley .... do...	14,635	23,644	121,130	106,394
Lard .... do...	28,684	24,081	30	16
Butter .... do...	8,676	2,767	10,075	11,557
Eggs .... do...	22,550	10,693	1,440	1,692
Horses .... head..	57,155	57,557	10,207	12,225
Cattle .... do...	98,614	78,528	132,702	145,163
Hogs .... do...	548,789	416,001	262,394	377,897
Sheep .... do...	6,718	9,825	1,036,560	917,063
Wine .... tons..	39,672	42,488	20,609	11,633
Tobacco leaves .... do...	26,668	26,024	1,723	3,651
Coffee .... do...	96,595	91,419	18	20
Rice .... do...	58,242	63,996	13	6
Tea .... do...	1,204	1,285	4	4
Sugar .... do...	2,198	2,241	358,404	308,603
Brandy (not mixed) .... do...	331	540	51,650	55,038
Petroleum .... do...	261,292	287,817	112	86
Pit coal and coke .... do...	1,975,048	1,878,116	6,699,271	6,930,265

* Ton = 22 cwt.

A noticeable increase took place in scrap and pig iron (56,000 tons) and manufactures of iron (68,990 tons).

The condition of textile industry is reported to be more favorable than has been the case for many years past. The increase of woolen yarn exported in these nine months amounted to about 22,000 cwt.; silks and half silks, 10,000 cwts.; linen and jute articles, 4,400 cwt. An increase is also reported of exported wood and leather articles, of wine, &c.

On the other hand, the quantities imported of nearly all the items set forth in Exhibit C show a decline, in some instances to a very considerable extent, so that in this year the commercial balance is evidently in favor of Germany.

The first six months of the German fiscal year, commencing April 1, 1886, show the following net proceeds of duties and taxes in excess of the same period of the preceding year, viz:

	Marks
Duties	4,203,701
Tobacco tax	268,181
Sugar tax	9,754,386
Salt tax	394,357
Brandy tax	1,179,396
Brewing tax	499,052
Total increase	16,299,073

The total amount of revenues from these sources being 167,833,500 marks in 1886, against 151,594,487 marks for same half year in 1885.

STATEMENT OF A REPRESENTATIVE OF THE IMPERIAL GOVERNMENT.

In the recent debates of the German Reichstag on the enactment of the German-Spanish treaty of commerce, in which the Liberal party attempted to make the protective policy of the Government, adopted since 1879, responsible for the decline of trade in 1884 and 1885, the representative in response pointed to the fact that the chief articles of export in Germany, such as cattle, sugar, spirits, and iron, had extraordinarily receded in price.

> Suppose [he demonstrated] we underlay to our export returns of 1885 the prices of the most favorable year of the so-called "free-trade" period (prior to 1879), we would arrive at a figure of 4 milliards of mark for exports in 1885, a figure which cannot be shown by any single year of the free-trade period.

He continued to argue that it was altogether due to the increased exports within the last years, chiefly to America, that Germany succeeded in getting back from abroad those 600,000,000 marks in gold, which, owing to its former unfavorable commercial balance, had left the country. As a "reliable barometer," as a "mathematical proof of the nature of Germany's foreign relations," he mentioned the rates of exchange for bills, which for two years past had been in favor of Germany. Gold on hand continued to increase, coming in from abroad. Two factors regulated commerce with foreign nations: Balance between imports and exports of goods, and credit and debit of public securities (stocks and bonds).

Nevertheless a Berlin paper of influence expresses the opinion, in the face of the above figures, that many of the convinced adherents of the dominant protective policy begin to entertain doubts about the success of the latter. They compare the period of the very first commercial treaties with the politico-commercial events of more recent years with a view to imminent political disturbances most likely to occur before long. Those treaties were concluded for a number of years; the exterior calmness of commercial relations then seemed to be secured and not exposed to disturbances such as nowadays are coming from divers quarters, and at unaccountable intervals troubling, almost uninterruptedly, business and trade.

During the decennials for which those treaties were concluded the custom tariffs of the respective countries remained nearly unchanged, and the manufacturers were therefore able to control, easily, their foreign commercial relations.

The comparatively long term of duration of the treaties gave them guarantee that the economical policy of the several countries could not, at will and at a chosen time, change business calculations.

Since the expiration of the treaties (in the years from 1860–'70) this state of things has totally changed.

The treaty of 1860, concluded by Napoleon III with Great Britain, tended to reduce the rates of the general French tariff in order that this reduction might be followed gradually by other reductions, preparing the way for free trade; other states followed the example, and the whole movement resulted in a haggling about the rates of the old tariffs. When the time for the expiration of these later treaties approached the situation had again changed.

On the European continent both manufacturers and Governments had come to the conviction that all of the liberal commercial treaties made under Napoleon III had only served the interests of Great Britain, by securing to this country industrial preponderance. The demand for higher duties became then more and more general, and the repeated prolongation of the term of treaties was only intended to gain time for new negotiations.

But all these preparations had but one object, namely, to introduce a tariff serviceable as a weapon for new treaty negotiations. To grant further reductions of tariff rates was by no means intended.

The later treaties distinguished themselves from the former by the small number of stipulations as to tariff rates, while the old treaties, not uncommonly, were based upon true conventional tariff rates. The autonomy was thus restored to the several contracting states, and the era of high protective tariffs recommenced.

A change has, as already alluded to, also taken place regarding the term of treaties, in order to obtain back, as soon as possible, freedom of action for a quick utilization of experiences made. Treaties are in recent times concluded only for a few years.

In 1878 Italy introduced a new tariff with a long list of increased rates. Germany followed in 1879 with its tariff for the protection of "national labor"; France in 1881, transforming its ad valorem duties into such collected by weight, but, implicitly raising duty rates. Austria Hungary followed in 1882. In Switzerland a higher tariff was passed in 1885, and this year, 1886, Roumania enacted a general tariff. Amended tariffs are said to be once more in preparation in Germany, Austria, Italy, and France. It is stated that Brazil recently has given notice for the expiration of all commercial treaties with European countries which lapse in 1887.

No wonder that manufacturers have become demoralized and despondent.

PROTECTIVE MEASURES CLAIMED FOR GERMAN SOCIAL REFORM.

Ever since the dogma of protection was promulgated a great transmutation in social political views has taken place. Germany took the leadership in adopting a so-called social legislation.

Acquisition of all railroads by the state, acts providing for sick and invalid laborers and seamen, are only preliminary steps in this direction. The intervention of the state in industrial matters, its providence and care for the economical and moral prosperity of its subjects, become more extended. A Berlin paper says:

> Protective duty is not only the first step towards social reform, but also its first condition. The same has created new economical bodies, a new national order, dividing, so to say, the international economy into national groups of as high a development as possible. To continue the structure upon this basis also, in an international respect, is now the task of the future.

The writer thinks here of treaties or conventions to establish a uniformity in laws for the protection of laborers, their wives and children, for the sake of humanity.

INSTRUCTIVE OPINIONS OF NEWSPAPERS AND BOARDS OF TRADE

The Board of Trade at Barmen reports, among other statements, the following:

> The state of things in Belgium, France, England, and the United States of America is manifestly far worse than with us. In all these countries considerable reduction of wages, extensive discharges of laborers, and dangerous strikes are the order of the day. In consequence thereof we have witnessed in several parts of Eng-

> land and France, in Belgium, and of late also in the United States and in Italy, bloody riots and a brutal destruction of property. * * * England, with its free trade, has, within the last six years (since 1879) made less economical progress than Germany. While the English export trade has remained almost stationary since 1879, German commerce and also production of coal and pig-iron has considerably increased. If this was possible in England, despite her immense wealth in capital, her long-established commercial relations all over the globe, it is at any rate evident that a protective system—which at least secures the home market—has comparatively upset the free-trade theories of England and Belgium.

On the same topic the London Times of September 6 last wrote a lengthy article, from which I may be permitted to quote a few interesting passages:

> But a time has come at last in which other nations are entering into active competition with us, and in which that competition is aided and fostered by every means which their respective Governments can command. Among these means must be numbered the acquirement of colonies and trading stations, the support of manufactories, and the active assistance of ministers, consuls, and agents. * * *
>
> There is the fact of the presence of an army of private or commercial agents, whose first care it is to master the languages of the people to whom they are sent, to understand their wants and their prejudices, to ascertain the qualities which they most highly value, and to keep their employers informed on these matters in such a way as to modify the character of the goods which are exported. * * * A traveler or agent should be acquainted with the technical processes of the manufacture of the article in which he deals, so as to see what variations in the character of these articles would be practicable as well as commercially profitable. * * * A mere desk training is not sufficient, and should be supplemented by time spent in the workshop. No amount of consular interference will preserve the trade of manufacturers who fail to adapt their wares to the requirements of consumers. * * * We believe that the commercial success of the Germans in many countries in which they have only recently obtained a footing is in large measure due to their devotion to work, to their being content with small profits, and to the fact that they stick to business while their rivals are amusing themselves.

A BRITISH CONSUL ON GERMANY'S IMPORTS INTO SPAIN.

As under the new consular convention, just ratified between Germany and Spain, their reciprocal relations deserve notice, I add here an extract from a report of the British consul at Madrid as to German imports. He reports that the export in 1884 reached an extent twenty-six times larger than it was in 1885, that the Spaniards complain frequently of the shoddy quality of German goods; nevertheless the German traveler gained the precedence over his French and English rivals. The former understood the Spanish language and got, therefore, great advantage over those who must offer their services through an interpreter or simply produce their price lists. In Malaga, the consul states, exists a colony of young Germans, who there acquire the Spanish language and study the tastes of the people.

FRANCE AND GERMANY.

France, some time ago, delegated to Germany one Mr. Amédée Marteau, with the special instruction to study the present condition of German industry.

The *Petit Journal* published recently on this subject articles in which it was stated that the German industry since the year 1877 had immensely developed, and that to day it controlled every market, even in France, by virtue of the cheapness of its manufactures and the advantageous terms which are granted to business men and other buyers. These articles were accompanied by a synopsis as to the increase of

German imports into France, and the decrease of French exports to Germany, viz:

Years.	German imports into France.	French exports to Germany.	Balance in favor of—	
			German imports.	French exports.
	Marks.	*Marks.*	*Marks.*	*Marks.*
1875	349,000,000	426,900,000		77,900,000
1876	389,000,000	431 200,000		42,200,000
1877	372,800,000	395,100,000		22,300,000
1878	418,500,000	343,700,000	74,800,000	
1879	413,000,000	343,500,000	69,500,000	
1880	438,200,000	361,900,000	76,300,000	
1881	454,700,000	383,000,000	71,700,000	
1882	476,500,000	335,800,000	137,700,000	
1883	461,700,000	326,000,000	135,700,000	
1884	416,900,000	327,000,000	89,900,000	

GERMAN AND FRENCH EXPORTS TO THE UNITED STATES.*

While Germany in 1877 exported to the United States for $27,971,512.29, and France, $49,183,691.47; Germany in 1886 exported $76,588,045.18; France, $64,979,036. Thus exports to the United States in the last nine years went up from Germany by $48,000,000; from France only by $16,000,000.

JAPAN AND GERMANY.

A report of a German consul in Japan speaking particularly of imports of drugs and chemicals, says:

> China and England depend here on German firms through which business is transacted, especially during the last three years, since the introduction of a regular direct shipping opportunity from Bremen and Hamburg to Japan. German chemical and pharmaceutic preparations have become so popular that during 1885 Japanese buyers made it a condition that these articles should be of German origin.

REVIEW OF THE ECONOMICAL YEAR 1885 IN THE PRINCIPAL CIVILIZED STATES.

Prof. E. Struck, of Aix-la-Chapelle (see Schmoller's *Jahrbücher*), gives the following figures as to the extent of decrease in exports for 1885 as against 1884:

	Germany.	England.	Austro-Hungary.	France.	United States.
	Marks.	*Marks.*	*Marks.*	*Francs.*	
Imports	316,000,000	320,000,000	53,000,000	137,600,000	$41,700,000
Exports	344,700,000	400,000,000	4,600,000	47,000,000	60,000,000

The substance of his further demonstrations is as follows:

Everywhere a sinking of values of imports and exports; if same in Germany is comparatively larger, the author ascribes this to the trade with agricultural products, which especially suffered from declining prices.

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* Taken from consular reports.

A retrogressive movement is noticeable also in the inland trade of these states. In this respect Germany appears to be better off than the other states:

Years.	Revenue from railroads.	Circulation of Imperial Bank.	Production of pig-iron.
	Marks.	*Marks.*	*Tons.*
1884	888,160,000	12,130,000,000	3,562,000
1885	892,000,000	12,547,000,000	3,652,000

In England the revenues from railroads amounted to £54,000,000 (£1,000,000 less than in 1884).

The returns of the London Clearing-House fell from £5,755 to £5,502 *i. e.*, by £253. Pig-iron production went down from 7,530,000 to 7,250,000 tons; the number of bankruptcies went up from 4,394 to 5,089.

In Austria-Hungary the receipts from railroads increased by 800,000 florins only; the returns in bills of exchange declined from 630,000,000 to 510,000,000 florins; raw iron production from 352,300 to 344,600 tons.

In France the loss in railroad receipts was considerable—38,000,000 francs.

French papers of recent date point emphatically to the unexpected influence which the St. Gothard Railroad exerts upon French railroad and maritime business. This railroad establishing the best and most direct communication between the countries of Northwestern Europe and Italy, the Suez Canal and India, receives, so to say, as the main river all the tributaries of export business from its adjacent countries. Even Northern France sends its goods by this way to the Levant, &c.

The returns of the Bank of France fell, with 1,266,000,000 francs short as against the preceding year; pig-iron production diminished from 1,872,000 to 1,629,000 tons.

In the United States revenues from railroads remained at the same height, and only comparatively small decreases occurred in the returns of the different clearing-houses ($43,905,000,000 to $41,961,000,000), and in pig-iron production from 4,590,000 to 4,530,000 tons, while the beginning of an improved economic condition showed itself in the smaller number of failures (total liabilities fell from $226,000,000 to $124,000,000) and the increased number of furnaces in blast.

If the decrease of German imports and exports—apart from England—appears to be more considerable than in other States, and this particularly in view of the prostration of agricultural interests; yet Germany, and next to it, America—probably owing to their protection of national labor—stand comparatively favorable, inasmuch as inland trade and consumption are concerned. Worse in every respect appears to be England.

In contradiction to Professor Struck's deductions seem to be the views of another economist, the well-reputed Leroy-Beaulieu. In a treatise published in the *Revue des Deux Mondes* on "The decline of prices and the crisis in international trade," he states, among many other very noteworthy data, the true causes of overproduction as follows:

The opening of large continents; the improvements in technics; new ways of trade and traffic; improved money circulation; increase of merchant marines, &c.

Many of the prevalent economical evils he ascribes to the protective policy as well as to other artificial means to incite industrial activity; to the inexpedient costly augmentation of public works, which not only cause pressure from taxes but also withdraw means from private enterprises.

> The household of the world [a commentator adds] has entered upon a new era; the causes and effects are of so profound and far reaching a character that all explanations deduced from superficial, transitory, incidental, and single occurrences or measures must be regarded, from the very outset, as a failure and a fallacy.

These inferences of a free-trader seem to be in contrast with reported indications of the merits of the German protective policy since 1879.

Thus wages show a rising tendency, and the statement in my last annual report "that the only class of people who derive advantages from low prices of provisions, with permanent work, while wages remained unchanged, are the workingmen," holds, to say the least, true also at this time, and not only this. A fact to which in this connection weight must be given is, that since 1879, the year of the inauguration of a protective policy, Germany's population experienced an increase by 3,000,000 persons, the largest portion of which must be counted as belonging to the working classes; and yet no lack of work was noticeable. Further, the savings of the less affluent people in Prussia show a constant rising percentage. The savings banks in Prussia reported for the last year, 1884–'85, an increase of 1,042,000 marks over the year 1883–'84.

Considering the amounts invested, the following classification is reported for 1884–'85:

Amounts invested.	Increase.	Per cent.
	No.	
Up to 60 marks	97,563	9.54
Over 60 to 150 marks	54,858	8.49
Over 150 to 300 marks	30,029	5.22
Over 300 to 600 marks	20,731	4 [illegible]
Over 600 marks	23,049	7.92
Total	272,232	7.54

The percentage of the smallest investments up to 60 marks, which in the years 1872 to 1876 permanently fell, and since 1879 first slowly but from 1882 very considerably rose, shows from the last year again an increase.

The total amount of all investments (amount of interest added) at the close of the year 1884–'85 was 149,375,423 marks.

These savings banks are almost exclusively used by the smaller people, while the more wealthy classes deposit their moneys with so-called deposit banks.

A decrease shows itself also in the number of paupers in Prussia receiving relief either from cities or townships, &c. Expressed in percentages, this decrease is as follows:

Items.	1884.	1885.
Number of inhabitants	27,279,111	18,312,833
Number of paupers	929,411	958,282
Percentage of paupers	3.87	3.66

GERMAN OPTIMISM.

The *Kölnische Zeitung*, itself a National Liberal paper, says:

> If we were to believe the observations of the so-called "Liberal" papers [mostly antagonists to protection] on the present business condition, one might be induced to think that Germany suffers want and poverty; but if you cast your eye upon the

life and movements of the people, if you observe trade and traffic, the circulation of capital, the rush for watering places, the increased facilities of transportation, &c., you will notice, as a rule, a more or less comfortable, thriving state of things. Of real undeserved poverty there is nowhere the question, even if the expenses of large cities for paupers increase in proportion to the increase of their total amount of expenditures, and of their working population * * * Of famine nobody can speak; opportunities of work for people willing to work are not lacking, perhaps with the exception of commercial clerks and technicists.

Against the nocuous consequences of diseases and injuries provision is made by sick funds, and insurance in case of accidents. Primary schools of an acknowledged excellent system are accessible, either free of charge, or at very cheap rates, to the lowest social classes.

The question of good and cheap dwellings is solved every day better with the increased building activity favorable to the laborer.*

That, as a rule, the great masses of the people enjoy a comfortable living, can be judged from their clothing, their dwellings, amusements, &c. Ragged people, excepting tramps shunning work, are but rarely to be found; on the contrary, a certain decency in clothing on Sundays and holidays and certain sumptuousness on festival occasions is perceptible. * * *

How considerably the property of our nation in foreign bonds and securities has grown is proven by the fact that two milliards of marks, the estimated amount ot Russian state bonds, are in the hands of German holders. We possess a large number of shares and bonds of Austro-Hungarian and Russian railroads. We are creditors of Austro-Hungary, Roumania, Servia, Turkey, Italy, Egypt, Spain, Sweden, and Norway. Our banks have lately negotiated an Argentine loan, shared in the negotiation of a Portuguese loan, &c.

Mines and smelting works, at present comparatively in the worst condition, do not discontinue work, but enlarge and improve their works and plants—in the cities, activity in building houses; in the country, of canals, and as the main railroad lines are nearly completed, the construction of branch railroads; of iron steamers instead of wooden vessels is carried on; and finally, Germany can point to a well administrated state budget, in which the items of loans are more than counterbalanced by property yielding interest, such as railroads, forests, domains, &c.

VIEWS OF A PESSIMIST.

It is but proper to complete this picture by the statements of a Conservative paper, pleading in favor of severe protection. The *Reichsbote* writes under date of November 3, 1886, as follows:

Every productive labor is complaining. Agriculture, trade, and industry show so low a state of prices of their products, that they are hardly able to produce any longer without risking economical ruin. One should think that with such low prices living would be cheaper than it was formerly, but the contrary is the case; the pressure of prices relates only to the wholesale prices, but not to the retail prices for consumers. Everybody complains that former incomes are no longer sufficient to meet both ends; not only the farmer and mechanic, but also the classes who live on their salaries or annuities, notwithstanding that salaries of state officials, &c., have been considerably raised in recent years.

Parents in the country, who must send their children to schools in the city, are nowadays compelled to expend double the amount as compared with former years. But not only the subjects complain of insufficient means, the states also are continually short of funds.

Nearly every fiscal year closes with deficiencies. In spite of the revenues having augmented immensely, the expenditures do outrun them notwithstanding, and a demand for larger revenues, by opening new sources of finances and taxes and duties, is addressed to the Parliament of the Empire and the several German states almost every session.†

Hence everywhere want of money to meet the necessities of life, with simultaneous complaints of low prices for productive labor. On the other hand, Germany has an abundance of money, more than this country ever possessed heretofore. As soon as the "Bourse" opens a subscription for any foreign loan, even the worst funded, the same is on the very first day subscribed far beyond the amount wanted. Capital is offered impetuously, the rate of interest declines, and all large debtors dictate to their creditors a reduction of the rate of interest; from 5 per cent. it has fallen to 4½, from 4½ to 4, and from 4 quickly down to 3½ per cent.

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*In the German states there exist very stringent laws and provisions as to building houses, and the requirements of hygiene are particularly taken into consideration.

†This year the German Empire has a deficiency in its budget of 33,000,000 marks.

How may these remarkable contradictory occurrences be explained? How does it happen that the prices of manufactures at the time of their production, hence the wholesale prices, are so low, may continue to decline, while retail prices are high and rather continue to rise?

This question is of the utmost importance, for in it lies the source of our calamities. The pressure of wholesale prices weighs upon the producer and places him in a compulsory condition, while the high retail prices again affect the necessaries of life for the consumer; and both evils bear heavily upon the domestic trade and the production for home consumption, impairing with the great mass of population the susceptibility of consumption. Which are now the causes of this state of things? The chief cause, in our opinion, are the maneuvers of the "Bourse." The latter introduces foreign loans into our country, thus making us tributary to foreign states. Since these have no money they must pay the interest in products, and this at any price. But not only the interest, also manufactures exported by us to those countries have to be paid by them in products, consisting, as a rule, in agricultural products with which we are already overstocked. This subjects our farmers to such an enormous competition that their prices are pressed down and their susceptibility to consume domestic manufactures is weakened. Their sales at home are curtailed, and our industry is compelled to make constantly new arrangements for exportation. But appearing in the foreign markets it encounters the competition of all manufacturing states, and is thus under the necessity to underbid same by selling at prices receding more and more every day, thus causing a decline of prices through international rivalry. In order to make up to some extent for this shortcoming, our manufacturers seek to keep prices at as high a level as possible by the expedient of "cartels" [conventions].

Upon domestic retail prices, however, the intermediate or commission trade and the existence of large cities exert an immense influence. Through how many hands has grain to pass before it appears in the form of bread on the table of the consumer! Similar is the case with regard to meat, milk, vegetables; and, indeed, the price of provisions continues, at present, to be on the same level as many years ago, when wholesale prices of agricultural products were twice as high as they are now.

In smaller cities and in the country where producers entertain direct relations with the consumer, and are less dependent on the commission trade, the case stands not so bad as in large cities; in case of necessity baking and butchering can be done on one's own estate, but in the large city the intermediate trader has all connections in his own hand, and the more powerful he becomes, owing to an ever-increasing concentration of capital at single places, the more powerful becomes intermediate trade.

And prices of the large cities react on prices in the provincial towns and in the country generally.

In consequence of fluctuations and unprofitableness capital is withdrawn to a greater extent from production every day and turns to commerce, and particularly to the "Bourse." Thereby the rotation of evils just described, and thus the economic calamity is more and more intensified. The masses of capital pouring into the bourses whenever there is a loan negotiated, urge negotiators to devise schemes for new loans, and the more needy the countries are the larger commissions have to be paid to the financial agents, whose risk is but a very slight one.

The German capital going to foreign countries promotes there industry and farming, while those at home are impaired, and the borrowing country having no money is compelled to pay interest with its products. Thus the new loans for Buenos Ayres will force that country to export a larger volume of produce, and thus, by their competition, aggravate the condition of German farmers.

The growth of financial transactions in the exchanges of Germany is confirmed by an article of the London Pall Mall Gazette.

German merchants, by taking control of export trade, have attracted the adjustment of foreign debts to Berlin, Frankfort-on-the Main, &c. English financiers and French bankers are amazed at the large progress made by Berlin as a money market. By its aid Russia bade defiance for years to the mistrust of Western Europe. Scandinavian loans were negotiated in Germany at prices that by far exceeded those which financial houses of London were willing to offer. Italian, Spanish, and Portuguese securities were alternately placed on the German markets, which continue to show a taste and a greedy appetite for other loans of the world. England has lost her monopoly as "banking firm of the globe."

Of late, the German Bank was, however, compelled to raise successively rates of discount to 3½, 4, and it will be raised to 5 per cent.; and the rate of interest on loans, on depositing bonds of the Empire or the German states, to 4 per cent.; on depositing other collaterals, 4 per cent. This measure is regarded by financial circles as merely preventive, to strengthen the reserves of the bank. But as there is no scarcity of specie on hand, rather an excess above the average amount for the year 1885, and a decrease of the assets of bills of exchange, conservative papers explain the measure as intended against the speculation in foreign emissions and securities, considering the low rates of interest at home. This steady decline of rates of interest during the last years has led to a period of conversion of all domestic bonds and securities. The Prussian state commenced at comparatively brief intervals to reduce its 5 per cent. state bonds successively to 4½, then 4, and recently proceeded to convert first-mortgage bonds of the railroads, acquired by the state, into 3½ per cent. bonds. The example given by the state was eagerly followed by manorial, agricultural, township, and other corporations, so that during the last two years the chief activity of the financial world consisted in effecting such conversions.

German capital has thereby been injured very palpably, even if granted that Germany's wealth experienced a large augmentation in the last decade of years. This undesirable state of things has resulted in a demand for foreign paper, bearing the higher rates of interest. This affects largely the branches of industry, which, on the whole, are stated to be in an inchoate state of prostration, since a great change for the better is hardly expected in the near future.

The railroad systems and the transmutation of sailing vessels into steamers is now nearly completed in the chief countries of Europe. Thus the aims of industry are here nearly fulfilled, and now confined to mere repairing and supplementing inventories, plant—an irrelevant work in comparison with the astonishing achievements of the last four decennials.

But one of the large enterprises to be carried out in the near future will be the construction of the North and Baltic Sea Canal, necessitating a loan of about 150,000,000 marks. Nineteen millions have just been appropriated by the Reichstag as first installment. In past years various projects have been brought forward to connect the North Sea with the Baltic Sea.

The canal is to have its egress between St. Margarethen and Brunsbüttel, on the Lower Elbe, thence deviating and cutting through the Kudensee in the marshy district, following the valley of the little river Burger-Au, and proceeding by way of Burg (15 kilometers) to Gröndel (30 kilometers), the highest ground traversed. It then follows the valley of the Giesel-Au to Wittenbergen (42 kilometers), where it emerges in the Lower Eider.

The next place of importance on the route is Rendsburg (62 kilometers), which is passed on the north side; the canal then following the Upper Eider lakes, leaves the latter at 75 kilometers distance, cuts through the north side of the Flembuder Lake, and merges in the west side of the harbor of Kiel (99 kilometers). The locks necessary will be of a character to facilitate navigation to the greatest extent.

The canal is to serve both for military and commercial purposes. The total length of the canal will be 99 kilometers; the width of the surface, 60 meters; and at the basis, 26 meters, the depth being 8½ meters.

Without danger of collision it will be possible for two of the largest merchant vessels to pass each other, and a large man-of-war, like the König Wilhelm, will be able to pass a large merchant vessel.

It is estimated that the excavations will reach 64,000,000 cubic meters, and that 71,000,000 marks will be paid in laborers' wages. The canal will be crossed by four railroad lines.

The construction of this canal is looked upon as another effort to better the condition of trade and industry in Germany.

CONVENTIONS FOR FIXING PRICES.

Commercial papers contain nearly every week notices of efforts to conclude conventions, successful or otherwise, for limiting production and fixing prices.

Thus, *pourparlers* of the leading rubber manufacturers resulted in an agreement to raise prices for rubber balls by 25 to 30 per cent. By the way, Germany exports from about 5,000,000 to 6,000,000 marks of that article per year, which can only be made by hand. Its manufacture grants support to thousands of male and female laborers.

Six of the largest manufacturers of pig-iron of Upper Silesia, one of the two great mining districts of Prussia, concluded, on the 21st day of October, 1885, the following convention:

> The undersigned works bind themselves up to the 1st of April, 1887, not to have more furnaces in blast than they have at present. Towards the end of this month a meeting shall be held in order to increase prices of pig-iron by all contracting works.

A like convention is contemplated by owners of rolled-iron works. One advocate of such conventions says:

> The end of these price reductions cannot be determined as long as production and sale of German iron articles lack united organization of the manufacturers, and as long as the works, by continually increasing production in excess of demands, reduce their cost-price by little degrees, but, at the same time, involuntarily, to a smaller or greater extent reduce their selling prices, solely in order to place their products on the markets.
>
> On the other hand, one or the other owner of iron works thinks, by cheap sales without profit, to ruin competitors. This, of course, may occur, and the late competitor may leave the work as a bankrupt, but the work itself, provided it be, both in its technical adjustment and geographical location, equal to the competing works, remains. It changes only the proprietor; the mortgage creditors are ready to acquire the works at a price far below its real value, and then, with a very low capital invested in the works, considering the cheaper cost-price, they are enabled to bring their product anew in the market, perhaps making the late victor a victim in the struggle for life.

DIVIDENDS.

Such complaints seem to be well founded. From a comparative statement as to dividends paid in the year ending June 30, 1885, with the estimated dividends to be paid this year, I learn that of 60 works (of which 47 are iron and mining works) only 3 are expected to pay a somewhat higher dividend this year, while 21 did not pay any dividend at all in both years. But there are exceptions. A machine work paid this year 33 against 27 in the preceding year; a dynamite work, 12 to 13 against 6½; and a chemical work paid only ½ per cent. dividend more this year. Better results are reported for the year 1886.

As above stated, even friends of protection become doubtful in the face of such facts, and the question whether free trade or protection is preferable continues in Germany to remain a rich theme of discussion. It may be that, on the one hand, cause and effect are often confounded with each other, and, on the other hand, that the international calamity is not in any decisive manner influenced, be it for good or bad, by the question of protective duties.

It is granted that the change made in Germany's economical system was already the result of a calamity generally felt. This latter existed prior to the introduction of protective duties, and the same continues to exist in spite of same even to-day.

Concerning the influence of customs barriers upon the whole situation of international trade, it seems as if Germany had, under all circumstances, overrated the same. Notwithstanding considerable duties on grain, for instance, the prices for cereals constantly recede.

Free-traders deduce from this fact the uselessness of these duties, while their opponents claim that the state derives therefrom higher revenues without prejudice to consumers; but, nevertheless, the fact of low corn prices and a bad condition of farming remains.

Not the system of economy, but causes beyond the reach and control of state reformers, seem to further deteriorate the markets of the world. Over-population in all occupations, higher claims of all social classes in their modes of living, the transition of many nations hitherto mostly consumers to the side of producers, and the natural limits to the expansion of the market—all these circumstances combined had, of necessity, to conduce to an economical crisis that, irrespective of theories, has not failed to make its appearance in all countries, whether free-traders or protectionists, whether old or young—in short, everywhere.

A difference exists, perhaps, only in the degree of calamity. I have pointed already to one of the remedies, or rather palliatives, to which German manufacturers had recourse, namely, price conventions. Another is sought for in a further increase of duties (the next Reichstag will disclose this fact); further, in the conclusion or amendment of commercial treaties—a rather two-edged sword, as I have shown above. Copies of latest conventions I have not failed to transmit to the Department of State, viz , of German treaties with South Africa, Spain, &c.

Colonial policy is another catch-word. Tropical colonies are said to enable Germany to appear in the world's market as producer of articles for which heretofore it was compelled to pay England large amounts of money.

The excess of tropical produce imported into Germany over exports is as follows: Cotton, 179,000,000 marks; coffee, 123,000,000 marks; tobacco, 145,000,000 marks. The total amount of money paid for all sorts of tropical articles is rated at 780,000,000 marks per year.

Further, colonies shall serve to employ that mass of disposable working forces (who either are entirely unemployed notwithstanding their partly costly education, or serve to augment at home the surplus of discontented people) for the erection and production of raw material, and thus to enlarge the number of paying consumers.

The objection to the unhealthiness of African climate is refuted by the argument that Africa is no more unhealthy than any other portion of the globe situate within the same zone; and that if the Spaniards, in their time, on account of the fever climate, had allowed themselves to refrain from a farther advancement into America, it would be doubtful whether America had ever attained that important place which it to-day occupies in history and industrial development.

To give an idea of the methods and results of cultivation in torrid zones the "Central Association for Commercial Geography," friends of a colonial policy, arranged in 1883 a so-called South American Exhibition at Berlin, in the rooms of the newly built edifice of the Waaren Börse (exchange for natural products and commodities). This exhibition is intended as an instructive representation of the plentifulness and richness of South American vegetation for all parties concerned in colonial pursuits. The South American exhibitors, all German emigrants, show a great variety of natural products, raw material, and goods therefrom manufactured. There were stately pyramids of specimens of coffee, a hut of lumber of palm trees, a great selection of tobacco sorts, ground-nuts, &c.

The animal kingdom was represented by beautiful skins and covers made of bird-skins and ostrich feathers, stuffed birds of magnificent plumage and luster, numerous samples of wool, &c. Of the mineral kingdom: ores, marble, and half manufactured articles.

As one of the best devices to incite trade and industry for exportation must be regarded the erection of a museum to exhibit in kind the produce and production of mankind, arranged according to the nations of the globe. Such an ingenious institution or rather academy of commerce was opened and inaugurated at Berlin, by Emperor William, a few weeks ago.

In a recent meeting of the Colonial Society one of the African explorers, Dr. Count Pfeil, alleged that they were aware already that their East African produce of cotton, coffee, and tobacco, &c., could stand competition.

On the 22d November a tobacco plantation company for East Africa was constituted with a stock capital of 1,000,000 marks, which was over-subscribed by 200,000 marks.

EMIGRATION.

In my report No. 151, dated June 19, 1886, I pointed to the efforts of German colonial societies, &c., to direct the stream of emigrants to the states of the southern continent of America. The result of this activity in meetings and in the press begins to manifest itself.

Attention is called to the fact that such decrease is noticed only with regard to North America, but not to South America; on the contrary, emigration to the latter continent, especially to the La Plata states, is reported to be on the increase. The growth of commercial relations between Germany and South American states is pointed to as a cause of increased emigration. Thus, for instance, while in 1871 the Hamburg South American Steamship Company commenced to run four vessels only, and made, seven years ago, not more than twenty-four to twenty-five passages per year, to-day there is employment for twenty large steamers, making three times as many passages as heretofore.

In 1884 two hundred and ten German vessels, with a tonnage of 293,656, called at Montevideo.

The emigration of Germany has this year considerably decreased.

E.—*German emigration in ten years*, 1876–1885.

Year.	To United States.	To British North America.	To Brazil.	To Central America and Mexico, South America.	To Australia.	To Africa.	To Asia.	Total.	Percentage of emigrants for 10,000 inhabitants of the German Empire.
1876	22, 767	11	3, 432	847	1, 226	54	31	28, 368	66
1877	18, 240	11	1, 069	537	1, 806	750	31	21, 964	50
1878	20, 373	89	1, 048	545	1, 718	394	50	24, 217	55
1879	30, 808	44	1, 630	517	274	23	31	33, 327	75
1880	103, 115	222	2, 119	539	132	27	36	106, 190	235
1881	206, 189	286	2, 102	876	745	314	35	210, 547	464
1882	189, 373	383	1, 286	1, 205	1, 247	335	40	193. 869	425
1883	159, 894	591	1, 583	1, 125	2, 104	772	50	166, 119	362
1884	139, 339	728	1, 253	1, 335	666	230	35	143, 586	311
1885	98, 628	692	1, 718	1, 639	604	904	72	103, 642	222

Emigration, 1872 *to* 1886 *inclusive*.

Year.	Number of emigrants.	Year.	Number of emigrants.
1886	59, 576	1878	19, 758
1885	88, 180	1877	17, 848
1884	122, 345	1876	22, 751
1883	183, 954	1875	25, 405
1882	160, 906	1874	87, 201
1881	172, 584	1873	84, 962
1880	79, 957	1872	96, 243
1879	25, 546		

As a sort of adjunct to the German Colonial Association appears the Herman Company, its object being the establishment of German agricultural colonies in Brazil. This company will enter into commercial life in the spring of 1887. The colony of San Feliciano, in the Brazilian province of Rio Grande do Sul, is the one immediately under consideration. A capital of 500,000 marks is thought to suffice, at the outset, to provide for steamship communication, road construction, and river regulation.

SUBSIDIZED STEAMSHIP LINES IN OPERATION UNDER ACT OF APRIL 6, 1885.

On the 30th June last the first steamer left Bremerhaven for East Asia, promptly followed by other steamers according to the time tables. The results of that measure have thus far been reported as favorable. The shares of the North German Lloyd rose in a very short time from 105 to 112. Against all apprehensions, the steamers came back with full cargoes, not only for Germany but also for other countries. A business of so-called "throughgoing (transit) bills of lading" between New York and China, Japan, &c., by the instrumentality of these new lines, has commenced greatly to develop through agents of the Bremen Lloyd in New York.

In Bremen the goods arriving from America are reloaded on board the steamers of the East Asiatic lines, which on the way home bring large quantities of tea for New York.

TRANSMARINE BANK.

The emancipation of German trade from the agency of English bankers is regarded as another expedient to promote German trade. Computations have been made that the sum which English banking houses derive from transmarine trade as commission amounts to about 6 milliards of mark per year, of which Germany's commerce carries a considerable portion. Nearly the whole importation of raw material from Asia, Africa, and Australia is effected through English agents, while imports from South America chiefly feed agents at Havre, Antwerp, &c.

Taking one article, cotton, for instance, it is stated that Germany in 1885 imported same through the mediation of Austria-Hungary with 4,207,700 kilograms; of Italy, 6,017,300; Switzerland, 398,500; France, 6,924,200; Belgium, 36,808,900; Netherlands, 9,684,000; Great Britain, 21,651,900; and of wool, through Belgium, 27,381,700 kilograms; Great Britain, 21,944,400.

It is now intended to procure for German commerce the negotiation of drafts on Germany in transmarine markets. This colonial bank shall be authorized to buy and sell gold and silver in coin or bullion, to make, accept, buy, sell, and discount bills of exchange, to grant loans on deposit of bills, invoices, securities, and goods, to advance money on shipments from and to non-European states, collect moneys, &c. The details for the organization of such a bank, which is to be fathered by the "Deutsche Bank" of Berlin, have not yet been published, but it is stated that the stock capital is fixed at 10,000,000 marks. A branch establishment is intended for Buenos Ayres.

Besides this colonial bank the foundation of a German Imperial bank for transmarine banking is contemplated, and a bill is to be submitted to the Reichstag. This Imperial bank is to be a center for over-sea trade.

Another institution of apparent usefulness for German trade is the "Deutsche Handelstag," an association formed twenty-five years ago at Heidelberg. The same consists of the leading German merchants, manufacturers, and other influential men, and meets once a year at one of the large trade centers of this country. The meeting of this year took place at Berlin. All German boards of trade were represented. Its object is stated to be the interchange of experiences, the mutual communications of the various conditions within the several districts and business lines, by ascertaining the requirements of production, sale, and exchange of commodities, &c., at the different manufacturing and trading places.

The projected German national exhibition of trade and industry for 1888, though supported by many advocates, did not meet with the approval of the large iron manufacturers, for the reason that the utility of such an enterprise would be rather problematic, considering the frequency of exhibitions and the amount of expenses connected with them. On account of these objections the Imperial Government desisted from proceeding any further in the matter. Similar reasons were given for Germany's non-participation in the French exhibition.

SIEMENS' PROPOSED INSTITUTE.

Special attention, however, deserves a step recently taken by Dr. Werner Siemens, that well-renowned inventor and electrician of Berlin, in the interest of German art and science, towards the foundation of a "Physical-technical institution for promoting, by experiments, the exact sciences of nature and the precision-technics." Dr. W. Siemens offered to the German Empire a donation of 500,000 marks for an institution of this kind. The German Government did not hesitate to accept the liberal offer, and the German Reichstag appropriated, a few days ago, the necessary funds in the budget for 1887–'88.

This institution is to be divided into two main departments: (1) into a "scientific department," which is to devote itself exclusively to theoretic researches within the scientific domain concerned, and (2) into a so-called "technical department," intended to utilize furthermore the results of those scientific researches in a technical respect, and to render them available for scientific technics. With this head, or central station, similar stations of a smaller scale shall be organized in the different German states, to remain in constant connection with the head department, to secure an interchange of experiences made and a uniformity of procedure, experimenting, &c., an organization analogous to the imperial department for the maintenance of standard measures and weights. Without the establishment of such a head, or central department, for securing the fundaments of physical measurements, as well as for a regulated and precise adjustment of occurrent differences, it would be risked that the results of the single experimental stations could lead, instead, to a diminution, to an augmentation, or at least to an intensification of uncertainty, since a disagreement in the results of several public experimental stations is particularly annoying to the parties concerned.

ESTABLISHMENT OF A SEMINARY FOR ORIENTAL LANGUAGES.

I have referred to opinions of foreign press and representatives as to Germany's advantage in having a large stock of merchants, factors, and agents speaking the language of the country where they reside. But this country does not acquiesce in endeavors to improve her position. On the table of the German Reichstag, now in session, the Imperial Government has laid a bill to provide for the establishment of a seminary for Oriental languages, a measure taken both in favor of trade and of consular and diplomatic service. It shall be connected with the Berlin University, and its object is the teaching of living Oriental languages, with practical exercise in at present six languages, viz, Turkish, Arabic, Persian, Indian, Japanese, and Chinese. As a rule, there shall be two teachers for each of these languages, one a German, well versed in same by a long residence in the country concerned, and the other a native teacher.

The consular corps of Germany consists at present of 641 consular officers and 68 *consules missi* among 750 consular officers, viz:

In—	Offices.	Consules missi.	Officers.
Europe	359	29	421
Asia	60	17	75
Africa	52	6	61
America	154	14	178
Australia	16	2	20

AN EUROPEAN ZOLLVEREIN.

In concluding my review of the most striking features of Germany's efforts to expand her industrial and commercial power, I cannot forbear mentioning a scheme which, if carried out fully, is intended as nothing less than entirely cutting off America from the markets of Europe. This new-born child of modern political economy made its appearance under the temporary name of Central European Zollverein.

The *Kölnische Zeitung* again, which is said to be furnished periodically with semi-official articles, published a few months ago an article on the subject. I only extract, in translation, a few passages:

> While formerly arguments for the advisability of protective duties were found in their educational efficacy, and while their introduction was regarded only a mere temporary measure intended to gradually render domestic industry fit for competition with foreign, now the inverse case is expressly confirmed, viz, that our industry at present is at least as efficient as that of any other nation, but that by means of protective duties we must keep out foreign goods to retain our market for ourselves. While wheat in Prussia, from and after 1878, was subject to an import duty of 1¼ silver groschen per scheffel [1 scheffel = 1.5 imperial bushels], and in the time from 1827 to 1856 to 5 silver groschen per scheffel, Germany was a grain-exporting country, its exports exceeding imports finally by nearly 9,000,000 of scheffel per year. When in 1856 the rate of such duty was reduced to 2 silver groschen, and, after 1866, even duties were entirely abrogated, at once imports commenced to be in excess over exports, and so on. Analogous to this state in Germany are the conditions in the other states of the European continent, and it results therefrom that every country erects more and more artificial barriers against adjacent states. But such exclusion can be reasonable only with such lands as extend into all sorts of

climate and as derive all kinds of raw products from their own soil, and, in case their population is large and mercantile enough, to render at home possible an industrial working and utilization of these natural products.

In such a favorable situation of economy are the United States, England with her colonies, Russia, China, and, at a more remote distance, perhaps Australia.

American industry has in the last decennials taken a start which renders the supply of European articles more dispensable every day. Farming yields by far more produce than can be consumed. The large exportation from America which, therefore, must of necessity ensue at any price, will, in a controllable time, hardly diminish. A like aspect we obtain of the other countries mentioned, though the same have not yet reached a similar high degree of development.

Thus a double danger for western continental Europe draws near—on one side the abundance of the youthful, fertile soil of America and Russia, the fruits of which it will, at a not very distant day, be no longer able to pay fully in productions of its trade and artistic industry; and, on the other side, the working force of hundred millions of skillful and frugal Asiatics. * * *

* * * Now, as manufacturers at present seek voluntarily to reduce production for the maintenance of paying prices by means of conventions, there will hardly be any better and more efficient means, as Professor von Kaufmann, a political economist at the University of Tübingen, expounds, than that also the states [of the European continent] unite and by means of treaties expand their markets, so that the surplus in any one place within their dominions may serve to make up for the deficiency in another.

Such states most qualified to enter first into such conventions are Germany and Austria-Hungary. A zollverein of that extent would embrace 82,000,000 people. Both countries produce articles which mutually supplement deficiencies. Germany would, for instance, buy its needed breadstuffs in Hungary-Austria instead of in America; India, Russia, and Austria-Hungary would buy coal in Germany instead of in England. Barriers against such articles as are produced within the zollverein would thus be duly strengthened, while barriers between the two contracting parties could, if not entirely but as much as practically, be removed. Such an economical union, once established between the two countries mentioned, would be successively joined by smaller states of Europe, which, like Switzerland, Belgium, and Holland, are particularly confined to exportation; but even France, and with it Italy and Denmark, would, in joining that union, find their account in the fight against economical commonwealths, that like the United States, Russia, China, and Great Britain, embrace whole continents, not to speak of the many advantages the "United States of Europe" could derive therefrom for a uniform legislation in social questions and for a joint proceeding in political respects. * * *

A zollverein with Austria will, therefore, be one of the tasks of the next future. * * *

GERMAN AGRICULTURE.

Having thus far tried to give a general review of changes and other noteworthy occurrences in Germany since my last annual report, I shall now give some particulars with regard to topics which consular regulations suggest as desirable subjects for an annual report. As already alluded to above, agriculture continues to remain the "child of grievance" of Germany.

"Farming stands before bankruptcy," exclaims the *Kreuz-Zeitung*, a leading organ of the Conservative party, which consists chiefly of large land-owners. It depicts the general condition of Germany in very dark colors, as it writes:

> The signature of our time is the commercial collapse in the European states of culture. Farming standing before bankruptcy; industry and commerce, the destiny of which is fettered to the former, a primary trade, must be paralyzed. The sources of trade dry up, and the workingmen, without bread, will be driven towards social democracy. A catastrophe seems to be but a question of time. * * * Distance and time have become purposeless, and the trade with the remotest parts of the globe is accomplished at a speed that fifty years ago seemed to lie beyond the reach of possibility. * * *
>
> Owing to this astonishing development of intercourse and transportation, the immense plains of virgin soil in transmarine countries have been placed at the door of the European centers of culture.
>
> The price of cereals has within fifteen years decreased by more than half; since 1867, by 57 per cent. The present quotation of the Mark Lane Express of 28 shillings per quarter [English] red wheat is the lowest for one hundred and sixty years. Corresponding to the prices, receding with increasing importation, domestic farming must be abandoned as unprofitable. Figures speak for themselves.

Since 1880 wheat and rye [per 1,000 kilograms = 22 cwt.] fell by 32 per cent.; barley, by 27 per cent.; sugar, 35; spirits, by 38 per cent.; wool by 41 per cent.* Under the pressure of supplies from Australia and South America, which from 440,000 cwts, in 1863 went up to 2,228,000 cwt. in 1884, prices for very fine wool declined by 42 per cent.; for middling and inferior wool by 50 to 52 per cent.

Raising of sheep became thus unprofitable, and was therefore reduced to 56 per cent. of the former stock. The loss the German farmers sustained thereby is roughly estimated at 157,000,000 marks.

In the same proportion as Australia, New Zealand, and the La Plata states increased their export of mutton (slaughtered sheep), chiefly to England (in steamers with refrigerator compartments), the value of exports of sheep from Germany declined. The value of such exports amounted—

	Marks.
1883	41,357,000
1884	34,956,000
1885	26,460,000

It is even worse with raising neat cattle. Holstein butter, the finest product of German dairies, experienced in the course of the last nine years a decline in price of from 142.17 marks in 1876 to 79.6 marks in June, 1886. [Severe legislative measures against margarine and other artificial butter are under contemplation.]

Dry or lean cheese, which (by physiologists) is considered the most concentrated of all articles of human food, is absolutely unsalable. Some farmers have commenced to feed cows with milk from which the cream is skimmed.

It is stated that the importation of agricultural products into Germany during the years 1872–1885 exceeded exports by 8,067,800 marks in value, a comparatively high amount, considering the fact that for Prussia alone the total value of real estate (liable to ground-tax) reaches only the sum of 18,600,000 marks.

A more rapid decline of European farming is feared when the United States, compelled by a constantly increasing competition of young agricultural countries of the globe, will evince full earnestness in the pursuit to refine and finish their raw production.

Also, this writer propounds as a remedy against the calamities stated a European Zollverein, as above described (Russia and England excepted).

INCREASED IMPORTS OF CEREALS FROM INDIA.

The appearance of a new and dangerous competitor in the international grain market is an established fact; a competitor who is able to produce even more cheaply than the United States. A Berlin trade journal (speaking of the recent fall of the price of silver, and calling special attention to the circumstance that silver had reached the lowest rate of exchange ever noticed, viz, 46$\frac{3}{16}$*d.*), remarked:

The lower the price of silver sinks, the more disturbance of international trade by such depreciation of silver is felt. For, in the silver market, the supplanting of supplies of American cereals by Indian wheat comes into consideration.

To what extent this displacement goes on the English returns of commerce furnish a clear evidence. During the first quarter of 1886 England imported of wheat as follows:

[In 100 kilograms = 2.2 cwt.]

From—	1885.	1886.
Russia	1,293,000	1,200,000
Egypt	716,000	....
Australia	608,000	170,000
United States:		
Atlantic coast	3,839,000	1,363,000
Pacific coast	3,207,000	2,165,000
India	1,739,000	3,242,000

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*See also inclosed table, A, page 139.

The total exports of India rose, during the time from April 1 to July 31, 1881, from 5,895,000 cwts. to 10,622,000 cwts. in 1886.

Somewhat of a contradiction to the above complaints of German farmers gives the official publication of legally enforced public sales of real estates in Prussia, which show a decrease:

1882	16,194
1883	13,573
1884	10,528
1885	10,309

But with the striking fact that while Western Prussian provinces show a continuous decrease, the Eastern show a steady increase of public sales. In 1885 larger estates and with a better quality of soil were publicly sold; this seems to prove that the calamity of German farming becomes more intense even with estates which heretofore were better founded financially.

USURY ACT.

Much, it is true, has been done towards protecting farmers and other small people against the extortion of high rates of interest on loans and mortgages. Thus the German usury act, in force since May 24, 1880, provides that—

> Whoever, by taking advantage of distress, levity, or inexperience of another person for a loan, or in case of deferring payment of a sum already due, allows or causes such advantages of property to be promised or granted either to himself or to a third person, as exceed the customary rate of interest to such an extent that, according to the merits of the case, the advantages are strikingly disproportional to the service rendered, shall be cognizable for usury, and be punished with imprisonment within six months and a fine not exceeding 3,000 marks.

Institutions are granting loans to land-owners at very low rates of interest on intangible mortgages, except in case of public sale and of such a depreciation of the realty that its net proceeds would not even reach the minimal amount of 150 marks, and except in cases where the debtor did not fulfill the obligation to insure against fire and hail. Thus, for instance, a single provincial bank, the directors of which are mostly large settled land-owners, gave, up to the close of 1885, loans on mortgages to 940 among 1,673 estates (under the statutes of the bank entitled to loans), amounting to a total of 152,551,580 marks in the single province of Brandenburg. And while heretofore a rate of 4 and 3½ per cent. interest was paid on such mortgages, the bank has availed itself of the present low rates of exchange in the money market by causing a general conversion of all 4 and 3½ per cent. paper into securities with lower rates of exchange.

But all these palliatives seem to be insufficient to delay the final ruin of many farmers. The decline of prices for agricultural products is constant, and this can surprise nobody, since, as Leroy Beaulieu states, the soil applied to farming on the globe has, in recent years, increased by 56 per cent. It is claimed that the augmentation of industrial articles kept pace with the increase of population in the last twenty years, and that the prostration of business is not so much due to overproduction as to weakness of the purchasing power. And, with all this, it is reported that India produces at present already as much as the United States, though 3,000 geographic square miles of the best soil are still waiting for tilling.

CRY FOR HIGH, ALMOST PROHIBITORY DUTIES ON CEREALS.

A speaker in the Prussian House of Representatives, pointing to the fact that land-owners had at the utmost only a net revenue of one-third, two-thirds being consumed by indispensable expenses for the maintenance of the estate, made it a demand of urgency that duties on wheat should be raised to 22 marks per 100 kilograms, and for rye to 15 to 16 marks. He argued as follows:

> India offers us wheat at 10 marks for 100 kilograms (2.2 cwt). Now, adding 2½ marks for cost of transportation, and 3 marks as the present rate of duty, such wheat would be salable with a profit in our markets, when sold at a price of 15½ marks per 100 kilograms; while the domestic product sells at prices from 150 to 197 marks per ton (1,000 kilograms = 22 cwt.)

COST OF PRODUCING GRAIN IN PRUSSIA.

The Central Agricultural Union of East Prussia called recently for a report on the subject from the different districts of the province. Forty-nine reports were received in reply, stating that such cost in case of rye amounted for 1 scheffel (1. 5 imperial bushels), at 80 pounds, at 4 to 6.67 marks, on an average, 5.16 marks. In case of wheat, for 1 scheffel, containing 85 pounds, 5 to 8-23 marks; on an average, 6.17 marks. This would be equal to 150 marks per 1,000 kilograms of wheat; 129 marks per 1,000 kilograms of rye; while at Königsberg, the chief trading place of East Prussia, in October, 1885, 150 marks, and November and December, 149 marks per 1,000 kilograms, and at Dantzig, the next large grain market, only 131 to 139 marks were paid for wheat; and for rye at Königsberg 118 to 123 marks, and at Dantzig 120 to 125 marks per 1,000 kilograms.

F.—*Quantities of cereals and potatoes harvested, imported, exported, used as seed, and left for consumption.*

[In tons = 22 cwt.]

Year.	Rye.	Wheat.	Barley.	Oats.	Potatoes.
Crops in—					
1881	5, 448, 404	2, 059, 139	2, 076, 160	3, 759, 789	25, 491, 022
1882	6, 390, 407	2, 553, 447	2, 056, 355	4, 508. 056	18, 069, 322
1883	5, 600, 068	2, 350, 878	2, 131, 202	3, 718, 469	24, 906, 431
1884	5, 450, 992	2, 478, 883	2, 229, 598	4, 236, 665	24, 019, 601
1885	5, 820, 095	2, 599, 271	1, 260, 645	4, 342, 357	27, 953, 643
Imported for consumption—					
1881	642, 696	462, 182	320, 279	339, 523	32, 474
1882	541, 390	723, 886	433, 735	169, 837	33, 299
1883	843, 690	499, 365	426, 486	405, 626	26, 007
1884	842, 122	780, 671	583, 683	293, 406	51, 194
1885	432, 043	146, 436	397, 690	109, 334	29, 694
Exported—					
1881	12, 854	106, 923	144, 857	21, 257	209, 882
1882	19, 221	145, 987	100, 315	46, 513	397, 412
1883	7, 284	63, 953	53, 777	22, 449	178, 919
1884	4, 763	32, 838	43, 780	14, 098	110, 085
1885	3, 840	19, 335	29, 962	16, 526	163, 715
Total amount at disposal—					
1881	6, 078, 246	2, 414, 398	2, 252, 082	4, 078, 055	25, 313, 614
1882	6, 912, 576	3, 131, 346	2, 589, 775	4, 631, 380	17, 705, 219
1883	6, 486, 474	2, 786, 290	2, 503, 911	4, 101, 646	24, 753, 519
1884	6, 288, 351	3, 226, 716	2, 769, 501	4, 515, 973	23, 960, 760
1885	6, 248, 298	2, 726, 372	2, 633, 373	4, 435, 165	27, 819, 622
Quantity for seed—					
1881	832, 798	314, 021	237, 018	596, 195	5, 535, 076
1882	834, 844	304, 303	236, 883	596, 114	5, 531, 098
1883	818, 770	332, 646	252, 666	599, 556	5, 812, 525
1884	992, 260	328, 744	261, 437	604, 111	5, 815, 260
1885	991, 455	327, 872	262, 079	605, 487	5, 832, 667
Balance for consumption—					
1881	5, 245, 448	2, 100, 377	2, 015, 064	3, 487, 860	19, 778, 538
1882	6, 077, 732	2, 827, 043	2, 352, 892	4, 035, 266	12, 174, 126
1883	5, 617, 704	2, 453, 644	2, 251, 245	3, 502, 070	18, 940, 994
1884	5, 296, 091	2, 897, 972	2, 508, 064	3, 911, 862	18, 145, 500
1885	5, 256, 843	2, 398, 560	2, 371, 294	3, 829, 678	21, 986, 955

G.—*Principal crops harvested in the German Empire in the years 1878–'79 to 1885–'86.*

Articles.	Area under cultivation in 1885.	Quantity harvested.		Quantity harvested per hectare.	
		Yearly average in the last 7 years, 1878–'84.	1885.	Yearly average in the last 7 years 1878–'74.	1885.
	*Hectares.**	*Tons.*†	*Tons.*†	*Tons.*†	*Tons.*†
Wheat	1,913,821	2,387,930	2,599,271	1.29	1.36
Rye	5,826,618	5,760,643	5,820,095	0.98	1.00
Barley	1,739,524	2,174,502	2,260,645	1.31	1.30
Oats	3,776,838	4,250,800	4,342,357	1.13	1.15
Spelt	374,553	461,613	466,447	1.20	1.25
Buckwheat	216,482	148,963	118,150	0.63	0.55
Peas	408,523	371,232	306,774	0.82	0.75
Potatoes	2,916,333	22,064,286	27,953,643	7.86	9.58
Beets and turnips	467,804	3,538,296	3,549,767	8.77	7.59
Hops	47,391	23,183	33,201	0.55	0.70
Wine	120,485	‡2,240,383	‡3,727,366	‡18.79	‡30.94

* 1 hectare = 2½ acres. † 1 ton = 22 cwt. ‡ 1 hectoliter = 22 gallons.

As to the crop in 1886 no official returns have as yet been published. By the "International Seed Market" of Vienna this year's crops are reported to be as follows (taking 100 as a middling crop):

Countries.	1886.	1885.	Countries.	1886.	1885.
Prussia	95	94	France	85	95
Saxony	95	100	Holland	90	95
Bavaria:			England	90	95
Franconia	102	100	Northern Russia	85	87
Suevia	105	100	Central Russia	55	75
Upper Bavaria	95	105	Podolia	60	90
Palatinate	90	100	Bessarabia	80	100
Wurtemberg	97	99	Roumenia, Moldau	85	115
Baden	85	97	Servia	90	110
Switzerland	100	125	Hungary	87	117
Upper Italy	125	70	Austria	92¼	104
Central Italy	80	78			

The crop of wheat in India is this year rated at 77,000,000 meter centners. On the whole, the east of Europe had a heavy, the west a slight, decrease against the preceding year.

H.—*Number of stationary and portable steam-engines and machines, as distributed among the different trades in Prussia in the years 1879 and 1886.*

Trades.	Stationary steam-boilers.		Stationary steam-engines.		Portable steam-boilers and machines.	
	1879.	1886.	1879.	1886.	1879.	1886.
Agriculture and forestry	326	441	210	310	2,522	5,374
Fishery	......	1	......	1	....	1
Mines, foundries, and salt works	9,460	11,215	8,350	10,505	770	927
Industry of stones and earths	1,154	1,632	1,052	1,441	422	579
Working of metals	1,286	1,687	1,200	1,528	148	174
Industry of machines, &c	1,467	1,640	1,486	1,684	208	219
Chemical industry	822	1,382	772	1,214	44	67
Industry of heating and illuminating stuffs	746	968	717	853	25	67
Textile industry	3,438	4,297	3,456	4,028	83	100
Paper and leather industry	1,047	1,460	957	1,279	29	58
Industry of wood and carving materials	1,364	1,911	1,287	1,777	242	417
Industry of articles of food and consumption	8,283	11,586	7,597	10,053	387	643
Industry of clothing and cleansing	385	599	243	363	8	23
Building trades	43	83	44	91	147	255
Polygraphic trades	236	294	208	256	49	62
Artistic trades	4	15	4	11	....	1
Commercial trades	26	303	31	279	19	100
Intercommunication (without navigation)	580	1,123	603	1,267	208	435
Hotels, public houses, &c	8	13	2	11	1	....
Trades for domestic purposes	260	438	165	238	8	36
Trades for purposes not yet defined	1,476	1,868	1,517	2,128	216	442
Total	32,411	42,956	29,895	40,308	5,536	10,1[illegible]

One of the largest works of agricultural machines and implements is the H. I. Eckert's Stock Company, which in 1885 closed up with a net profit of 261,795 marks.

DISTILLED SPIRITS.

I.—*Number, kind, and amount of production of still-houses in operation during the fiscal years from* 1879–'80 *to* 1884–'85—*Bavaria, Wurtemberg, and Baden not included.*

Fiscal year.	Still-houses operated.	Number manufacturing yeast.	Number of still-houses using—			
			Farinaceous materials.		Molasses.	Other not farinaceous materials.
			Potatoes.	Grain.		
1879–'80	27, 082	1, 274	4, 007	2, 990	32	20, 653
1880–'81	26, 801	1, 328	4, 272	2, 861	25	19, 643
1881–'82	29, 909	1, 294	4, 497	2, 759	24	22, 629
1882–'83	28, 201	1, 316	4, 180	2, 937	17	21, 067
1883–'84	32, 518	1, 327	4, 306	2, 935	19	25, 258
1884–'85	30, 409	1, 340	4, 303	2, 902	22	23, 182

Fiscal year.	Number of still-houses working farinaceous paid whisky tax.					
	Total number.	Up to 300 marks ($71.40).	300 to 1,500 marks ($71.63 to $357).	1,501 to 6,000 marks ($357.23 to $1,428).	6,001 to 15,000 marks ($1,428.23 to $3,570).	More than 15,000 marks ($3,570).
1879–'80	7, 029	948	1, 326	2, 159	1, 540	1, 056
1880–'81	7, 158	958	1, 445	2, 102	1, 432	1, 221
1881–'82	7, 280	921	1, 461	2, 086	1, 370	1, 492
1882–'83	7, 184	895	1, 384	2, 083	1, 463	1, 359
1883–'84	7, 260	924	1, 454	2, 007	1, 507	1, 368
1884–'85	7, 227	805	1, 440	2, 006	1, 480	1, 406

J.—*Revenues from taxes on whisky and other spirituous liquors collected in that part of the German Empire which has a whisky-tax system in common (excluding Bavaria, Wurtemberg, and Baden).*

Fiscal year.	Gross receipts from whisky tax.	Duty on spirituous liquors imported from Bavaria, Wurtemberg, and Baden.	Duty on brandies imported from foreign countries.	Total gross receipts from all taxes and duties.	Bounties and drawbacks.*	Net receipts from taxes and duties.	
						Total.	Per capita.
							Cents.
1880–'81	$13, 630, 600	$28, 700	$424, 000	$14, 084, 600	$2, 874, 500	$11, 209, 500	31
1881–'82	15, 232, 600	28, 600	456, 400	15, 718, 400	4, 173, 000	11, 545, 400	32
1882–'83	14, 000, 200	28, 400	469, 900	14, 499, 300	3, 559, 300	10, 940, 000	29
1883–'84	14, 560, 000	27, 200	500, 100	15, 088, 100	3, 447, 100	11, 641, 600	32
1884–'85	14, 859, 600	30, 700	1, 148, 200	16, 039, 200	3, 405, 700	12, 733, 500	34

* For spirituous liquors either exported or used for technical purposes.

	Marks.
Tax	62, 435, 500
Transit duties	132, 200
Custom duties	4, 824, 500
Total	67, 392, 200
Drawbacks	14, 310, 000
Net revenues	53, 082, 200
Per capita of German population	1. 44

The efforts of the German Government to make spirituous liquors a better source of revenue by means of a monopoly has hitherto failed to be realized, as the Reichstag is averse to all monopolies.

PRODUCTION OF BEER.

Last year, like its predecessor, was favorable to the brewing industry. In fact it is noticeable that while many branches of industry are suffering and complaining, beer brewing holds its own in the Empire with characteristic tenacity. The prices of raw material were throughout lower than in the preceding years, and Germany's exports of beer show again an increase.

The prices for hops were, according to quality, 50 to 100 marks per 1 cwt. lower than in the preceding year, so that best Bavarian sorts sold at 150 to 200 marks only, and the best (Saatz) Bohemian hops at 200 to 240 marks per cwt. The better yield of the hops harvest in 1885 caused a further fall of hop prices. While, on a seven years' average, Germany harvested only 23,183 tons (1 ton=22 cwt.); it produced in 1885, 33,201 tons.

The crop of 1886 is estimated at a yield of 400,000 cwt. or 20,000 tons; but it is expected that the produce of the European continent will cover the quantity of hops needed. Otherwise the United States, provided a good crop would have been harvested, may have found here a good market.

In 1885 Germany imported of hops 1,384,900 kilograms, almost exclusively from Austria, viz, 1,363,000 kilograms, while it exported 12,672,700 kilograms.

	Kilograms.
Great Britain	3,893,600
Belgium	1,443,400
France	1,617,200
Russia	1,024,800
United States	554,700

Barley prices may be seen from Exhibit A, and amount of exports and imports from Exhibits CC and DD.

K.—*Quantity of beer produced within that portion of the Empire (exclusive of Bavaria, Wurtemberg, and Alsace-Lorraine) which has a brewing-tax system in common.*

[Ton = 22 cwt. 1,000 hectoliters = 2,200 gallons. Kilogram = 2.2 pounds. Liter = 1.76 pints.]

Fiscal year.	Breweries in operation.*	Breweries working for trade.	Brewing materials liable to tax.	
			Grain.	Substitutes.
			Tons.	*Tons.*
1880-'81	11,564	10,374	430,794	2,139
1881-'82	11,266	10,068	430,100	2,282
1882-'83	10,921	9,797	446,928	2,261
1883-'84	10,703	9,625	472,573	2,468
1884-'85	10,520	9,461	493,211	2,843

Fiscal year.	Quantity of beer produced.				To obtain 1 hectoliter of beer there were used together, with each other, on an average, of—	
	Upper fermented beer.	Lager beer.	Total.	Per capita.	Malt of grain and rice.	Substitutes.
	Hectoliters.	*Hectoliters.*	*Hectoliters.*	*Liters.*	*Kilograms.*	*Kilograms.*
1880-'81	7,931,100	13,204,900	21,136,000	62	20.4	.09
1881-'82	7,818,800	13,502,200	21,316,000	62	20.19	.09
1882-'83	7,901,200	14,212,000	22,113,200	64	20.23	.09
1883-'84	8,071,500	15,320,400	23,391,900	67	20.22	.08
1884-'85	8,384,200	16,229,200	24,613,400	70	20.07	.09

*Inclusive of so-called "house-breweries," working only for own private consumption.

N.—*Amount of brewing tax collected in the different brewing-tax territories of the German Empire.*

Fiscal year.	Bavaria.		Wurtemberg.		Baden.		Alsace-Lorraine.		Remainder of the German Empire.	
	Gross receipts.	Tax per hectoliter.	Gross receipts.	Tax per hectoliter.	Gross receipts.	Tax per hectoliter.	Gross receipts.	Tax per hectoliter.	Gross receipts.	Tax per hectoliter.
		Cents.		*Cents.*		*Cents.*		*Cents.*		*Cents.*
1880–'81	$7,343,700	0.62	$1,372,800	0.40	$734,200	0.63	$516,800	0.52	$4,163,000	0.20
1881–'82	7,097,000	0.62	1,782,800	0.45	905,400	0.76	494,300	0.52	4,184,600	0.20
1882–'83	7,481,800	0.61	1,719,900	0.56	888,900	0.76	428,900	0.52	4,311,800	0.19
1883–'84	7,597,500	0.61	1,743,400	0.56	929,700	0.76	438,900	0.52	4,557,900	0.19
1884–'85	7,800,600	1.42	1,728,100	0.86	941,200	0.59	423,200	0.27	4,763,000	0.14

BEET SUGAR.

In my report No. 206, dated November 5, 1886, I reported fully upon the critical condition of the sugar industry of this country.

By an act approved June 1, 1886, relating to sugar taxation, a new classification of sugar and a new method of collecting tax on beet sugar (equaling a reduction of export bounties) was introduced.

Section 1 provides that beet-sugar tax of raw beets for manufacturing them into sugar shall be collected at a rate of 1.70 marks (40 cents) per 100 kilograms.

Section 2 provides that for sugar either exported or warehoused in bonded warehouses or private-transit store-houses, provided that such quantity warehoused is not less than 500 kilograms, a bounty shall be granted at the following rates per 100 kilograms:

Kind of sugar upon which bounty is paid.	Amount.	Equivalent in United States money.
	Marks.	
(*a*) For raw sugar of at least 90 per cent. polarization and for refined sugar of at least 90, but not exceeding 98 per cent. polarization:		
(1) From August 1, 1886, to September 30, 1887	18.00	$4 28
(2) From October 1, 1887	17.25	4 16
(*b*) For candy and for sugar in white, full, hard loaves, lumps, tablets, cubes, &c., of at least 99½ per cent. polarization:		
(1) For the former period	22.20	5 28
(2) For the latter period	21.50	5 11
(*c*) All other hard sugar, not otherwise provided for, as well as for all white dry sugar (containing no more than 1 per cent. water) in crystals, also pulverized &c., of at least 98 per cent. polarization:		
(1) For the former period	20.80	4 95
(2) For the latter period	20.15	4 80

Section 3 gives owners of beet-sugar works—for the payment of the tax due on manufactured beets, upon security—a credit for a term (as a rule, to be prescribed) not exceeding six months.

This legislative measure, especially dictated by the fact that the revenues from sugar showed a very palpable deficiency, appears rather late, and, as is claimed, should have been resorted to when this industry was in a flourishing state.

MINES AND MINING.

Q.—*Production of German mines, salt-works, and smelting-works, in the years 1884 and 1885.*

[Ton = 22 cwt. Kilogram = 2.2 pounds.]

Product.	Quantity. 1884.	Quantity. 1885.	Value. 1884.	Value. 1885.	Average price per ton. 1884.	Average price per ton. 1885.
Products of mines.						
Mineral coal, and bitumen:	*Tons.*	*Tons.*				
Stone coal	57,233,875	58,320,273	$71,110,000	$72,972,000	$1 24	$1 25
Brown coal	14,857,979	15,355,677	2,404,000	2,574,000	16	17
Asphaltum	41,130	45,412	55,900	62,800	1 36	1 38
Naphtha	6,400	5,825	191,000	222,000	[illegible]	[illegible]
Mineral salts:						
Rock salt	344,797	377,491	482,900	495,000	1 38	1 31
Kainit	303,120	242,973	982,100	885,100	3 24	3 64
Other potassic salts	748,478	673,082	1,734,000	1,744,000	2 32	2 60
Ores:						
Iron ores	8,922,454	9,157,998	7,082,900	7,558,400	79	82
Zinc ores	632,449	650,422	1,861,000	[illegible]	2 94	2 67
Lead ores	160,641	156,160	3,668,100	3,551,100	22 84	22 74
Copper ores	583,231	621,060	4,319,400	4,573,100	7 41	7 36
Silver and gold ores	25,113	23,698	1,145,100	992,100	45 62	41 88
Common iron pyrites	150,130	215,316	79,000	223,000	2 05	1 02
Salts from aqueous solutions.						
Table salt (chloride of natrium)	482,921	467,380	2,981,000	2,794,000	6 17	5 98
Chloride of potassium	116,377	107,253	3,723,100	3,488,400	31 99	32 52
Glauber salt	45,440	47,530	436,100	423,000	9 60	8 90
Potassium-magnesium sulphate	25,765	27,208	309,400	338,000	12 01	12 42
Sulphate of alumina	15,974	19,447	352,900	433,000	22 09	22 27
Alum	4,164	4,230	136,400	133,000	32 76	31 44
Production of furnaces, foundries.						
Crude cast-iron	3,592,728	3,652,484	40,654,000	37,791,000	11 35	10 34
Zinc	109,614	113,356	7,066,000	6,981,000	64 46	61 58
Lead	71,519	72,943	3,562,000	3,586,000	49 81	49 16
Copper	18,750	19,415	5,287,000	4,657,000	281 98	239 87
	Kilogs.	*Kilogs.*				
Silver	288,946,190	290,332,514	7,432,000	7,145,000	*25 72	*24 61
Gold	554,964	610,550	369,000	406,000	*665 00	*664 86
	Tons.	*Tons.*			*Tons.*	*Tons.*
Tin	96	107	38,000	46,000	398 61	432 06
Sulphuric acids	312,501	318,900	3,212,000	2,985,000	10.27	9.36
Species of pig-iron:						
Foundry-iron	379,091	446,258	4,972,000	5,042,000	12.73	11.29
Ingot-iron	1,210,353	1,300,179	14,165,000	13,752,000	11.70	10.57
Forge-iron	1,922,392	1,854,611	20,304,000	17,798,000	10.56	9.59
Cast ware of first smelting	32,032	38,510	998,000	1,104,000	31.17	28.66
Scrap-iron and grains of pig-iron	13,343	12,778	170,000	156,000	12.72	12.22
Pig-iron manufactured.						
Cast iron of second smelting	646,473	682,012	27,941,000	28,163,000	42.30	41.29
Wrought iron and steel	1,403,047	1,471,150	46,782,000	40,425,000	33.34	27.48
Ingot-iron (including crucible cast-steel)	1,194,908	1,133,140	39,273,000	36,750,000	32.86	32.43

* Per kilogram.

R.—*Revenues from salt in the German customs territory.*

Fiscal year.	Net proceeds. Salt tax.	Net proceeds. Duty on salt.	Net proceeds. Total.	Net proceeds. Per capita.	Salt used for purposes exempt from tax. Agricultural. For feeding cattle.	Salt used for purposes exempt from tax. Agricultural. As manure.	Salt used for purposes exempt from tax. Industrial. In works producing soda and sulphate of soda.	Salt used for purposes exempt from tax. Industrial. In other industrial branches.
				Cents.	*Kilograms.*	*Kilograms.*	*Kilograms.*	*Kilograms.*
1880-'81	$8,862,000	$951,300	$9,814,300	22	95,777,000	2,801,000	122,863,000	54,677,000
1881-'82	8,941,400	877,900	9,819,400	21	94,337,000	4,143,000	130,468,000	50,627,000
1882-'83	9,153,800	838,200	9,992,400	22	97,890,000	3,005,000	148,418,000	40,200,000
1883-'84	9,219,500	830,300	10,049,800	22	100,730,000	3,538,000	160,271,000	41,410,000
84-'85	9,357,800	703,900	10,062,500	22	90,304,000	3,094,000	192,148,000	44,480,000

S.—*Letters patent granted for inventions and designs in the years* 1877 *to* 1885.

Year.	Patents granted.	Designs.		
		Plastic.	Surface.	Total.
1876	....	2, 660	10, 099	12, 759
1877	100	8, 843	45, 125	53, 968
1878	4, 200	9, 679	40, 356	50, 035
1879	4, 410	12, 560	37, 251	49, 811
1880	3, 966	13, 856	33, 784	47, 640
1881	4, 889	14, 943	36, 135	51, 078
1882	4, 131	15, 088	34, 517	49, 605
1883	4, 848	16, 248	38, 009	54, 257
1884	4, 450	22, 124	45, 765	67, 889
1885	4, 018	23, 319	49, 808	73, 121

T.—*Letters patent for inventions granted and expired in the years* 1877 *to* 1885 (*according to kind of inventions*).

Kind of inventions.	Patents granted.	Patents expired.	In force at the close of 1885.
Ore-dressing	106	64	42
Baking	134	92	42
Clothing industry	185	124	61
Illumination	642	488	164
Mining	202	208	74
Beer, brandies	690	448	292
Plates and wires	170	112	58
Bleaching, dyeing	642	430	212
Bristle articles	97	60	37
Burning-stuffs	186	100	86
Book-binding	268	185	83
Chemical apparatus	362	192	170
Steam-boilers	878	491	327
Steam-engines	644	439	205
Printing	514	313	201
Manu e	64	40	24
Ice-making	108	67	41
Production of iron	265	175	90
Tramways	477	303	134
Railroading	1, 176	806	370
Electrical apparatus	1, 086	621	465
Dye-stuffs	406	196	210
Grease industry	149	85	64
Fire places	373	249	124
Plaiting-machines	422	274	148
Gas-making	521	331	190
Blast	200	129	71
Tanning	118	68	20
Spinning-fibers	94	66	28
Hygiene	418	314	104
Foundry	176	92	84
Glass	161	112	49
Traveling-effects	403	331	72
Domestic implements	1, 341	1, 053	288
Lifters	195	109	86
Heating	678	391	287
Elevated building (superstruction)	575	404	171
Wood-working	444	316	128
Horn	173	125	48
Furnaces	220	109	111
Hats	68	58	10
Instruments	1, 047	1, 051	396
Baskets	23	9	14
Fancy articles	655	539	116
Agriculture and forestry	1, 280	929	351
Air and gas power machines	399	262	137

Kind of inventions.	Patents granted.	Patents expired.	In force at the close of 1885.
Machine parts	1, 142	800	343
Metallurgy:			
Chemical	81	50	31
Mechanical	1, 067	661	406
Mills	687	482	205
Musical instruments	586	395	191
Sewing-machines	541	293	248
Articles of food	176	122	54
Paper articles	206	132	74
Paper manufacture	273	142	131
Harness	185	110	75
Photography	136	95	41
Presses	196	114	82
Pumps	406	283	123
Governors	124	84	50
Life saving	183	128	58
Salt works	32	90	12
Saddlers' works	498	372	126
Ship-building	274	194	80
Butchers' works	108	85	23
Grinding	96	70	26
Locksmiths' work, tools	552	410	142
Tailors' works	175	149	46
Writing and drawing material	396	306	90
Shoes and boots	271	190	81
Weapons	537	328	214
Rope-making	19	11	8
Signal service	115	91	24
Potash, soda	243	141	102
Spinning	490	304	186
Sport	500	404	96
Explosive stuffs	118	86	32
Tobacco	125	91	34
Clayware	555	368	187
Transportation	191	107	84
Drying-contrivances	267	167	100
Clocks and watches	339	247	92
Water building	42	27	15
Aqueducts	548	428	125
Weaving	485	327	158
Tools	267	225	42
Wind and water power machines	200	160	40
Sugar and starch manufacturing	555	251	204
Total	34, 561	23, 515	11, 046

Not only the usefulness of an article, but also its artistic character has of late years been cultivated in this country with special care under the supervision of the German Government. The progress in art industry can be seen in every store in passing through the larger cities of Germany. This progress must be ascribed to the action of the German design protection act, enabling the poorest inventor to secure the protection of the production of his genius.

While our country collects for every single design (1) $10 on filing an application for a design patent for three years, (2) $5 on issuing a design patent for seven years, and (3) $20 on issuing a design patent for fourteen years, the Germans can have protected, upon one application, fifty designs (or models, if not exceeding 10 kilograms in weight) at the following rates: (1) 1 mark (23 cents) for one year in the first three years; (2) if a protection of a longer duration is sought, for every additional year up to ten years, 2 marks (47 cents); (3) in case of fifteen years, for every additional year after ten, 3 marks (71 cents).

In gold and silver articles business is said to have taken a new start, especially at Berlin, where skilled jewelers are much in demand. The weekly average wages for a journeyman rose from 18 marks in 1885 to 21 marks in 1886. The yearly turn-over in jewels in Berlin alone is estimated at 10,000,000 marks, and exports in these articles increase.

Especially articles rich in forms are manufactured at very reasonable prices. The brisk intercommunication with foreign countries made manufacturers familiar with the taste of other nations. The manufacture of gold articles is much influenced by a new act, taking effect in 1888, providing for stamping the fineness or standard on the articles made of precious metals, so that, when smelted, they must have the same fineness as the official stamp indicated.

PORCELAIN.

Porcelain shows likewise progress in its superior and artistic workmanship, rivaling now with the industry of Belgium. The Royal Porcelain Manufactory sets a good example. Great varieties of forms and styles, refined taste, and higher perfection of coloring and gilding are characteristic qualities of their productions. Importation of china from France has nearly ceased. Marvelous designs of porcelain tablets (for paneling the walls of cabins and saloons of the newly-equipped steamship Bavaria, belonging to the subsidized steamship line) are at present exhibited in the windows of that factory and attract the eyes of passers-by.

GLASS ARTICLES.

Business in glass articles is said to be improving. Sales in window-glass are very brisk, owing to much building activity. In articles of an inferior quality an overproduction is likewise noticeable, for which a market is sought in China and Japan. High duties have debarred, also, in this instance, the importation of foreign articles.

TEXTILE INDUSTRY.

To the few industrial branches which are reported to be in a comparatively favorable condition must be mentioned some lines in textile industry. Seldom has an industry taken such a development as weaving of tricots and tricot stuffs; but seldom has fashion taken, for so long a period, a taste for articles made of tricot. Although new manufactories have been erected in such number that overproduction was feared, yet rather a lack than a surplus is noticeable. About the beginning of 1886 the large importation to the United States was suddenly checked, as an American patentee was stated to have obtained an injunction on articles of that kind imported for infringement on his patent. Some of the large Berlin manufacturers of tricots tried to get over the obstacle by paying a royalty to the patentee. A report of recent date states, however, that the United States, England, and others now purchase large quantities from German tricot factories, chiefly located at Berlin, Chemnitz, and in South Germany. Notwithstanding this, prices are said to yield only a moderate profit.

A great activity shows itself also in the manufacture of carpets, though in design and beauty American carpets surpass the German article. In some cities of Germany new carpet factories are building.

But as in other lines of business, success challenges competition; competition again entails overproduction, and this makes profit impossible. This is true also in regard to carpet manufacturing. Imports of foreign carpets experience likewise a steady decline.

WOOL INDUSTRY.

A considerable improvement set in about the middle of the year 1886, when a rapid rise ot wool prices surprised the commercial world. Their effect consisted in brisker returns of woolen articles, and increased exportation of woolen piece goods (woolen cloths, plushes, velveteens) as well as of woolen trimmings, and button-makers' articles followed. In woven (long) shawls, hosiery, and fancy articles, business was, on the whole, rather dull.

LINOLEUM.

The manufacture of linoleum is about to get a footing in Germany. At present there are no more than three factories, though the article has been made in England for about twenty years. Consumption of this article increases in this country.

German architects, recognizing it to be a good, durable stuff, continue to find new application for it every day. The practice is now much in vogue, in rooms of new buildings, intended for stores, offices, workshops, restaurants, &c., first simply to lay a cheap plaster floor (cement or gypsum) and thereupon to put a layer of linoleum, thus entirely dispensing with a wooden floor. Thus, it is stated, a floor is made which in its massive underground is impermeable to both vermin and moisture. Such a cover of linoleum takes the place and has the advantages of a carpet, and can be made at cheaper rates than wooden floors.

RUBBER ARTICLES.

The manufacture of rubber articles is still very active. Several works were compelled to extend working time. Demand for rubber increases daily, and there is hardly an industry which nowadays does not try to make rubber, for its many good physical properties, serviceable. Finished rubber articles have experienced a rise of 10 to 15 per cent.

PAPER.

Among all European states, Germany possesses by far the greatest number of paper-mills, viz, 809 against 420 in France, 361 in Great Britain, 228 in Italy, and 220 in Austria-Hungary. The exportation of paper and paper articles (except pasteboard) shows a steady increase.

Nearly all other branches, as above stated, complain of depression in business and unprofitable prices, so that only large manufacturers, with abundant funds at their command, are able to keep up business to the exclusion of the smaller manufacturers who are unable to stand competition.

V.—*Comparative statement showing the number of German merchant ships January* 1, 1876–1886.

Year.	Sailing vessels.			Steamers.			Total.		
	No. of ships.	Registered tons, net.	No. of crew.	No. of ships.	Registered tons, net.	No. of crew.	No. of ships.	Registered tons, net.	No. of crew.
1876	4,426	901,313	33,215	319	183,569	9,147	4,745	1,084,882	42,362
1877	4,491	922,704	33,255	318	180,946	8,589	4,809	1,103,650	41,844
1878	4,469	934,556	32,659	336	183,379	8,173	4,805	1,117,935	40,832
1879	4,453	949,467	32,362	331	179,662	7,616	4,804	1,129,129	39,978
1880	4,403	974,943	32,158	374	196,343	8,131	4,777	1,171,286	40,289
1881	4,246	965,767	31,003	414	215,758	8,657	4,660	1,181,525	39,660
1882	4,051	942,759	29,593	458	251,648	9,516	4,509	1,194,407	39,109
1883	3,855	915,446	28,094	515	311,204	10,937	4,370	1,226,650	39,031
1884	3,712	894,778	26,937	603	374,699	12,678	4,315	1,269,477	39,615
1885	3,607	880,345	26,014	650	413,943	13,897	4,257	1,294,288	49.911
1886	3,471	861,844	24,925	664	420,605	14,006	4,135	1,282,449	39,931

W.—*Number and wages of full sailors and apprentices engaged during the decade of* 1876–1885.

Year.	Full sailors.	Apprentices.	Average wages per month.		Year.	Full sailors.	Apprentices.	Average wages per month.	
			Full sailors.	Apprentices.				Full sailors.	Apprentices.
1876	12,625	2,520	$13 53	$5 57	1881	13,150	2,335	$10 26	$3 50
1877	12,544	2,545	13 52	4 49	1882	13,174	2,578	10 74	3 66
1878	12,180	2,260	12 19	4 21	1883	13,598	2,629	11 36	3 80
1879	12,642	2,359	10 38	3 57	1884	14,101	2,432	11 32	3 75
1880	13,004	2,556	10 23	3 58	1885	12,947	2,069	11 09	3 66

X.—*Account of the shipping employed in the trade of the German Empire, exhibiting the number and tonnage of vessels that entered inward and cleared outward in* 1884.

From and to what countries.	Entered.				Cleared.			
	With cargo.		In ballast or unloaded.		With cargo.		In ballast or unloaded.	
	No.	*Reg. tons.*	*No.*	*Reg. tons*	*No.*	*Reg. tons.*	*No.*	*Reg. tons.*
German coasts	28,444	1,358,881	7,653	416,855	27,402	1,332,451	8,571	414,216
Russia	1,884	724,082	22	9,404	1,077	382,843	1,423	615,057
Sweden	2,462	368,146	166	37,221	1,476	294,829	1,426	363,069
Norway	1,310	305,767	34	6,746	539	136,567	722	168,076
Denmark	4,624	507,334	2,484	129,489	6,820	578,613	1,183	55,355
Heligoland	242	8,038	85	1,756	244	10,628	102	501
Great Britain	7,069	3,353,170	290	209,511	4,037	2,095,283	2,244	1,380,299
Holland	585	136,837	84	83,060	658	173,456	63	6,485
Belgium	180	76,622	29	15,747	231	109,320	9	6,066
France	287	146,472	69	37,995	462	190,106	8	4,137
Spain	89	56,980	3	1,349	184	104,883	5	1,502
Portugal	103	48,030	....	....	85	38,851	2	1,359
Italy	66	52,817	1	1,128	76	60,393	1	845
Austria-Hungary	8	6,627	....	....	12	9,701	....	....
Greece	2	875	....	....	....	....	....	....
Roumania	70	60,513	....	....	....	....	....	....
European Turkey	40	39,459	....	....	1	127	1	1,177
Uncertain	....	....	....	....	1	324	21	2,491
Whale fishery	54	3,707	....	....	54	3,581	....	....
Total Europe, except Germany	19,015	5,904,476	3,267	483,406	15,457	4,191,505	7,210	2,606,509

Y^b.—*Vessels entered and cleared in* 1884, *arranged by flags.*

Flag.	Entered.				Cleared.			
	With cargo.		In ballast or unloaded.		With cargo.		In ballast or unloaded.	
	No.	*Reg. tons.*	*No.*	*Reg. tons.*	*No.*	*Reg. tons.*	*No.*	*Reg. tons.*
Russian	455	104,622	10	5,352	201	51,628	274	62,159
Swedish	2,016	402,010	97	24,209	1,199	288,780	913	185,960
Norwegian	1,361	452,169	70	21,454	770	272,142	653	191,728
Danish	3,900	570,185	1,644	69,207	4,201	506,622	1,298	129,874
British	4,604	2,898,965	352	216,821	2,901	1,707,321	2,021	1,396,491
Dutch	637	131,889	87	9,915	558	119,895	145	20,924
Belgian	12	9,740	1	835	11	7,947	3	2,693
French	170	111,827	9	7,982	152	104,451	22	12,382
Spanish	72	44,141	25	15,014	92	57,249	6	1,687
Italian	52	32,840	....	....	16	9,294	34	22,877
Austro-Hungarian	20	10,277	....	....	13	6,713	6	3,098
Greek	19	20,406	....	....	1	1,195	18	19,211
Roumanian	2	1,801	....	....	....	....	2	1,801
North American	14	13,837	....	....	12	10,744	3	2,263
Other	3	1,979	....	....	1	324	1	339
Total German vessels	36,115	4,513,692	8,625	529,972	34,211	3,969,052	10,438	1,061,773
Steamers	11,886	3,255,280	852	202,686	11,140	2,804,819	1,547	672,281
Total foreign vessels	13,337	4,806,208	2,295	370,289	10,128	3,144,305	5,399	2,063,426
Steamers	7,343	3,801,430	555	309,799	5,500	2,658,469	2,421	1,525,147

Z.—*Kind and number of casualties having occurred near the German coasts in the year* 1885.

Kind of casualties.	Casualties.	Tonnage.	Crew and passengers.	Vessels lost.	Lives lost.	Casualties by flag.									
						German.	Russian.	Swedish.	Norwegian.	Danish.	British.	Dutch.	French.	Italian.	Greek.
Stranded	69	27,539	736	24	14	38	3	4	1	2	15	4	....	1	1
Capsized	11	65	33	1	4	11	....	....	....	....	....	....	....	....	....
Sunk	15	749	83	8	6	15	....	....	...	...	....	....	....	....	....
Collided	100	36,572	655	2	....	61	1	2	6	1	24	2	....	1	....
Other casualties	25	8,611	249	4	3	20	1	....	3	1	2	....	1	....	....
Total	220	73,536	2,705	39	27	145	5	6	10	4	41	6	1	2	1

Total German ships reported lost in 1885, 151, with 38,546 tonnage.

GERMAN IMPORTS AND EXPORTS.

Special commerce (*i. e.*, exclusive goods in transit) are shown in Exhibits AA and BB. Exhibits CC and DD are comparative tables, showing volume and value of chief articles imported into and exported from Germany during the years 1880–'85. Exhibit EE shows the volume of German imports from and exports to foreign countries of the world in 1885.

AA.—*Values of merchandise imported into the German customs territory during calendar year* 1885, *&c.*—Continued.

[Ton = 22 cwt. + denotes increase; – denotes decrease.]

Articles.	Goods imported for consumption.		Increase and decrease in 1885 as compared with 1884.	Value of such imports.				Increase and decrease in 1885 as compared with 1884.	Value of imports in 1885, same average prices as 1884.	Increase and decrease in 1885 as compared with 1884, the average price of 1884 being taken for 1885.
				1884.		1885.				
	1884.	1885.		Total value.	Percentage of total value.	Total value.	Percentage of total value.			
Raw materials and manufactures of stone and clay industry	*Tons.* 1,054,556	*Tons.* 1,010,258	*Tons.* – 44,298	11,372,000	1.45	12,232,000	1.72	+ 860,000	11,350,000	– 22,000
Earths and stones	884,704	861,991	– 22,713	7,999,000	1.02	8,933,000	1.26	+ 934,000	7,994,000	– 5,000
Stoneware	17,169	14,786	– 2,383	828,000	0.10	933,000	0.13	+ 105,000	663,000	– 165,000
Clay and china ware	145,919	126,004	– 19,915	1,092,000	0.14	773,000	0.11	– 319,000	1,061,000	– 28,000
Glassware	6,764	7,477	+ 713	1,453,000	0.19	1,593,000	0.22	+ 140,000	1,638,000	+ 185,000
Raw materials and manufactures of metal industry	1,388,001	1,346,081	– 41,920	31,103,000	3.98	40,474,000	5.69	+ 9,371,000	39,113,000	+ 8,010,000
Ores	1,034,994	1,045,699	+ 10,705	8,622,000	1.10	13,335,000	1.88	+ 4,713,000	11,530,000	+ 2,908,000
Raw metals, not precious; also coined	301,610	252,246	– 49,464	10,690,000	1.37	9,035,000	1.27	– 1,655,000	9,728,000	– 962,000
Roughly-worked metals	30,206	28,147	– 2,059	1,823,000	0.33	1,695,000	0.24	– 128,000	1,687,000	– 136,000
Manufactures of iron, except machines and scientific instruments	19,192	18,137	– 1,055	3,007,000	0.39	2,634,000	0.37	– 373,000	2,991,000	– 16,000
Manufacture of other precious metals	1,712	1,771	+ 59	1,052,000	0.13	1,230,000	0.17	+ 178,000	1,084,000	+ 32,000
Precious metals; also coined	287	181	– 106	5,909,000	0.76	12,545,000	1.76	+ 6,636,000	12,087,000	+ 6,178,000
Raw materials and manufactures of the wood-cutting and plaiting industry	2,008,820	2,738,600	+729,780	30,451,000	3.90	34,733,000	4.88	+ 4,282,000	37,295,000	+ 6,844,000
Timber, lumber, building-wood	1,946,647	2,683,925	+737,288	19,694,000	2.52	24,504,000	3.44	+ 4,810,000	27,088,000	+ 7,394,000
Cutting and plaiting materials	46,005	37,398	– 8,607	6,144,000	0.79	4,922,000	0.69	– 1,222,000	5,324,000	– 820,000
Woodenware, cut and plaited ware	16,168	17,267	+ 1,099	4,613,000	0.59	5,307,000	0.75	+ 694,000	4,883,000	+ 270,000
Raw materials and manufactures of the paper industry	48,483	51,026	+ 2,543	3,211,000	0.41	3,058,000	0.43	– 153,000	3,244,000	+ 33,000
Rags	42,547	45,534	+ 2,987	1,921,000	0.24	1,854,000	0.26	– 66,000	2,059,000	+ 138,000
Paper and pasteboard	4,648	4,330	– 318	683,000	0.09	688,000	0.10	+ 4,000	638,000	– 45,000
Manufactures of paper and pasteboard	1,288	1,162	– 126	607,000	0.08	516,000	0.07	– 90,000	546,000	– 61,000

BB.—*Values of merchandises exported from the German customs territory during calendar year* 1885 (*exclusive of goods in direct transit and goods refined and finished.—Special commerce*).

[Ton = 22 cwt.; + denotes increase; — denotes decrease.]

Articles.	Goods exported.		Increase and decrease in 1885 as compared with 1884.	Value of such exports.				Increase and decrease in 1885 as compared with 1884.	Value of exports in 1885 priced as in 1884.	Increase and decrease in 1885, as compared with 1884, the exports of 1885 being valued at the same prices as in 1884.
				1884.		1885.				
	1884.	1885.		Total value.	Percentage of total value.	Total value.	Percentage of total value.			
	Tons.	*Tons.*	*Tons.*							
Animals	223, 678	183, 078	— 40, 600	$35, 416, 000	4. 68	$28, 403, 000	4. 11	—$7, 013, 000	$29, 091, 000	— $5, 425, 000
Food and other articles of consumption	1, 792, 793	1, 083, 346	—109, 447	111, 184, 000	14. 28	98, 516, 000	14. 20	—12, 618, 000	105, 496, 000	— 5, 638, 000
Animal food	58, 794	57, 672	— 1, 122	13, 254, 000	1. 70	12, 007, 000	1. 73	— 1, 247, 000	13, 408, 000	+ 154, 000
Cereals, pulse, potatoes	249, 888	198, 140	— 51, 748	6, 699, 000	0. 86	3, 934, 000	0. 57	— 2, 765, 000	4, 624, 000	— 2, 075, 000
Mill-ground grain and baker's ware	176, 128	173, 261	— 2, 867	9, 413, 000	1. 21	8, 584, 000	1. 24	— 829, 000	9, 256, 000	— 157, 000
Fruits, vegetables	178, 219	151, 611	— 26, 608	3, 271, 000	0. 42	3, 530, 000	0. 51	+ 259, 000	2, 800, 000	— 471, 000
Table salt and spices	137, 880	132, 176	— 5, 704	9, 343, 000	1. 20	6, 746, 000	0. 97	— 2, 597, 000	10, 182, 000	+ 839, 000
Coffee, cacao, tea	19, 829	18, 823	— 1, 006	911, 000	0. 11	808, 000	0. 12	— 198, 000	849, 000	— 62, 000
Sugar, molasses, sirup	689, 212	635, 328	— 53, 882	45, 756, 000	5. 88	40, 373, 000	5. 82	— 5, 383, 000	39, 257, 000	— 6, 499, 000
Fermented liquors, mineral waters, table oils	271, 677	304, 480	+ 32, 803	18, 910, 000	2. 43	19, 053, 000	2. 74	+ 143, 000	21, 331, 000	+ 2, 421, 000
Comfits, preserves	4, 341	4, 560	+ 219	1, 440, 000	0. 19	1, 262, 000	0. 18	— 178, 000	1, 512, 000	+ 72, 000
Tobacco and tobacco manufactures	6, 825	7, 302	+ 477	2, 137, 000	0. 27	2, 218, 000	0. 32	+ 81, 000	2, 275, 000	+ 188, 000
Seeds and plants, not for food	103, 363	101, 863	+ 1, 505	6, 099, 000	0. 78	5, 962, 000	0. 86	— 137, 000	6, 850, 000	+ 751, 000
Manure and waste materials	254, 108	131, 421	—122, 687	4, 573, 000	0. 59	3, 194, 000	0. 46	— 1, 379, 000	3, 549, 000	— 1, 024, 000
Fuel	9, 886, 111	10. 021, 460	—135, 319	18, 251, 000	2. 31	22, 653, 000	3. 27	+ 4, 402, 000	18, 450, 000	+ 799, 000
Raw materials and products of chemical industry	465, 063	479, 682	+ 14, 599	63, 846, 000	8. 20	53, 852, 000	7. 76	— 9, 994, 000	65, 048, 000	+ 1, 202, 000
Salts, acids, sulphur, &c	222, 688	228, 577	+ 5, 889	16, 676, 000	2. 14	9, 544, 000	1. 38	— 7, 132, 000	14, 956, 000	— 1, 720, 000
Tanning stuffs, colors, &c	110, 060	108, 407	— 1, 653	21, 817, 000	2. 80	22, 289, 000	3. 21	+ 472, 000	22, 136, 000	+ 319, 000
Ferments, clearing stuffs	18, 687	28, 162	+ 9, 475	876, 000	0. 11	811, 000	0. 12	+ 45, 000	840, 000	— 16, 000
Drugs for medicinal purposes, sponges	3, 071	4, 780	+ 1, 703	5, 770, 000	0. 74	5, 959, 000	0. 86	+ 189, 000	8, 461, 000	+ 2, 691, 000
Resins	44, 375	43, 478	— 897	1, 713, 000	0. 22	1, 386, 000	0. 20	— 327, 000	1, 627, 000	— 86, 000
Mineral and other oils, &c	11, 257	7, 278	— 3, 979	1, 980, 000	0. 26	1, 536, 000	0. 22	— 444, 000	1, 541, 000	— 439, 000
Varnishes and lakes, lutes, glutens	14, 109	15, 361	+ 1, 252	2, 255, 000	0. 29	2, 021, 000	0. 29	— 234, 000	2, 357, 000	+ 102, 000
Fat oils and fats not for food	25, 104	26, 678	+ 1, 574	4, 297, 000	0. 55	3, 735, 000	0. 54	— 562, 000	4, 464, 000	+ 167, 000
Candles, soaps, perfumes	6, 776	5, 581	— 1, 195	5, 102, 000	0. 66	2, 321, 000	0. 33	— 2, 781, 000	4, 376, 000	— 726, 000
Priming goods	7, 293	8, 407	+ 1, 174	2, 832, 000	0. 36	3, 727, 000	0. 54	+ 895, 000	3, 367, 000	+ 535, 000
Others not declared	1, 668	2, 918	+ 1, 250	548, 000	0. 17	523, 000	0. 07	— 25, 000	922, 000	+ 374, 000

BB.—*Values of merchandise exported from the German customs territory during calendar year* 1885, *&c.*—Continued.

[Ton = 22 cwt; + denotes increase; — denotes decrease.]

Articles.	Goods exported.		Increase and decrease in 1885 as compared with 1884.	Value of such exports.				Increase and decrease in 1885 as compared with 1884.	Value of exports in 1885 priced as in 1884.	Increase and decrease in 1885, as compared with 1884, the exports of 1884 being valued at the same prices as in 1884.
				1884.		1885.				
	1884.	1885.		Total value.	Percentage of total value.	Total value.	Percentage of total value.			
	Tons.	*Tons.*	*Tons.*							
Cloths, linen underclothing	6,390	5,750	— 640	24,046,000	3.09	20,658,000	2.98	— 3,388,000	21,477,000	— 2,569,000
Bonnets, fancy feathers, and flowers	711	749	+ 38	5,516,000	0.71	6,363,000	0.92	+ 847,000	5,834,000	+ 318,000
Raw materials and manufactures of caoutchouc and wax industry	3,357	3,376	+ 19	5,265,000	0.63	5,645,000	0.81	+ 380,000	5,129,000	— 136,000
Caoutchouc	282	175	— 107	548,000	0.07	314,000	0.04	— 234,000	314,000	— 234,000
Caoutchouc threads, leather, and wax cloth	439	477	+ 38	380,000	0.05	399,000	0.06	+ 19,000	441,000	+ 61,000
Manufactures of caoutchouc	2,636	2,724	+ 88	4,337,000	0.56	4,933,000	0.71	+ 596,000	4,374,000	+ 37,000
Railway vehicles, upholstered carriages and furniture	8,346	5,920	— 2,426	927,000	0.12	1,040,000	0.15	+ 113,000	1,084,000	+ 157,000
Machines, engines, instruments, and apparatus	98,679	86,244	— 12,435	32,533,000	4.15	27,567,000	3.97	— 4,966,000	29,084,000	— 3,490,000
Fancy goods, ornaments	6,984	7,319	+ 335	23,667,000	3.04	18,477,000	2.66	— 5,190,000	23,376,000	— 291,000
Objects of literature and fine arts	10,798	11,505	+ 707	13,208,000	1.70	14,719,000	2.12	+ 1,511,000	13,673,000	+ 465,000
Articles not declared	277	77	— 200	204,000	0.08	101,000	0.02	— 103,000	56,000	— 148,000
Total	19,151,756	18,814,023	—337,733	778,117,000	100.00	693,831,000	100.00	—84,286,000	749,801,000	— 28,317,000

CC.—*Comparative table showing volume and value of the chief articles imported into the German Zollverien, &c.*—Continued.

Articles.	Quantity.						Value.					
	1880.	1881.	1882.	1883.	1884.	1885.	1880.	1881.	1882.	1883.	1884.	1885.
Raw sugar	1,489	1,678	2,321	2,056	2,036	2,408	$105,000	$202,000	$282,000	$235,000	$194,000	$221,000
Sugar, refined	2,727	2,513	2,170	1,854	1,252	1,303	415,000	389,000	325,000	247,000	135,000	124,000
Sirup, molasses	3,516	3,697	3,776	3,697	3,378	3,146	248,000	246,000	230,000	220,000	193,000	194,000
Molasses for brandies	9,831	1,834	67	430	129	282	269,000	38,000	1,000	10,000	2,000	5,000
Beer	12,070	12,062	12,761	13,537	13,645	13,163	603,000	601,000	607,000	644,000	682,000	658,000
Brandy, &c	4,446	4,614	4,517	4,855	7,590	6,325	1,023,000	1,042,000	1,300,000	1,414,000	2,080,000	1,775,000
Vinegar	244	254	231	203	209	175	30,000	31,000	28,000	25,000	26,000	22,000
Wine, cider in casks	43,763	44,747	50,954	52,211	53,746	54,103	5,728,000	6,390,000	7,034,000	7,331,000	7,930,000	7,062,000
Wine, cider in bottles	3,657	3,503	3,874	3,947	4,690	3,320	1,777,000	1,884,000	2,031,000	2,071,000	2,497,000	1,738,000
Oil in bottles	178	157	187	140	145	138	72,000	63,000	55,000	56,000	58,000	53,000
Olive oil	1,878	3,100	2,590	2,761	2,207	2,716	626,000	922,000	740,000	756,000	657,000	614,000
Confectionery, chocolate, &c	2,174	2,330	2,346	2,618	2,050	2,956	814,000	1,021,000	1,014,000	1,216,000	1,243,000	1,342,000
Tobacco, unmanufactured	10,326	20,643	28,976	30,472	34,487	38,297	3,140,000	6,296,000	12,317,000	10,484,000	11,919,000	2,323,000
Tobacco, manufactured	807	819	812	812	895	931	2,550,000	2,434,000	2,486,000	2,231,000	2,323,000	2,542,000
Guano	117,384	113,384	106,316	72,985	68,271	64,408	5,029,000	5,424,000	5,566,000	3,474,000	3,250,000	2,146,000
Bone-dust	14,630	18,272	25,242	21,820	28,248	22,089	522,000	652,000	961,000	779,000	874,000	629,000
Superphosphates	15,600	20,404	24,879	31,564	30,279	23,336	557,000	680,000	888,000	976,000	865,000	500,000
Pit coal	2,058,768	1,953,182	2,090,022	2,181,182	2,296,777	2,375,905	6,125,000	5,810,000	5,722,000	5,451,000	5,740,000	6,446,000
Coke	228,207	170,308	201,323	166,309	123,190	151,924	652,000	567,000	766,000	534,000	322,000	421,000
Brown coal	3,081,269	3,064,080	3,064,080	3,319,944	3,466,322	3,647,777	2,420,000	2,917,000	2,876,000	3,161,000	3,310,000	3,212,000
Ball soda	13,261	14,569	19,448	9,330	6,677	6,108	235,000	260,000	174,000	155,000	111,000	67,000
Soda ash	8,744	9,527	9,203	5,898	4,222	2,494	317,000	324,000	200,000	187,000	129,000	75,000
Caustic natron	8,004	5,548	6,577	5,231	3,615	3,262	533,000	370,000	422,000	336,000	224,000	171,000
Alum	789	560	441	326	330	462	30,000	21,000	18,000	10,000	10,000	14,000
Chloride of lime	7,221	7,145	5,817	5,127	6,339	6,178	215,000	170,000	138,000	183,000	250,000	206,000
Ammonia	33,783	34,652	34,147	27,904	35,907	35,070	2,216,000	3,381,000	3,418,000	2,324,000	2,568,000	1,878,000
Chili saltpeter	55,078	83,950	126,949	166,185	200,647	156,738	4,064,000	6,423,000	7,856,000	8,701,000	9,551,000	7,461,000
Tartar	2,464	2,644	3,132	2,455	2,795	2,173	1,319,000	1,416,000	1,416,000	1,160,000	1,331,000	1,134,000
Bark and tan	60,186	62,512	59,264	59,812	65,680	64,813	1,647,000	1,502,000	1,487,000	2,064,000	2,032,000	1,851,000
Catechu	5,210	6,438	5,571	6,645	6,043	5,653	806,000	919,000	862,000	949,000	762,000	673,000
Dye-woods	45,614	49,659	50,399	56,834	54,874	60,130	2,078,000	2,076,000	2,130,000	2,293,000	2,151,000	2,031,000
Dye-wood extracts	3,192	4,011	4,649	4,525	4,938	4,955	684,000	811,000	940,000	915,000	940,000	920,000
Indigo	1,232	1,633	1,562	1,718	1,934	1,969	4,260,000	5,441,000	5,018,000	5,315,000	5,753,000	6,091,000
Bone-black	16,656	25,138	33,710	27,145	21,108	19,967	793,000	1,199,000	1,966,000	1,583,000	1,206,000	903,000
Peruvian bark	1,498	2,168	2,579	1,793	3,708	4,338	3,209,000	3,612,000	3,990,000	1,706,000	3,089,000	2,735,000
Pine resin, turpentine	38,877	45,638	50,814	50,429	64,452	46,940	1,295,000	1,466,000	1,633,000	1,560,000	1,917,000	1,285,000
Petroleum	266,587	364,879	342,510	370,305	402,545	482,189	11,570,000	13,895,000	11,820,000	13,220,000	16,513,000	16,640,000
Other mineral oils	19,891	22,026	27,158	47,236	16,921	34,003	1,326,000	1,311,000	1,616,000	3,811,000	1,099,000	1,547,000
Turpentine oil	7,022	6,902	7,906	8,642	9,178	9,816	1,003,000	1,068,000	1,410,000	1,275,000	1,090,000	1,108,000
Oil varnish	2,563	2,841	2,431	3,014	3,373	3,188	357,000	399,000	335,000	359,000	385,000	334,000
Other varnishes	460	468	517	538	559	578	197,000	223,000	246,000	254,000	253,000	340,000
Olive oil, in casks	6,531	8,294	7,032	12,857	6,758	7,158	1,290,000	1,057,000	1,362,000	2,020,000	1,264,000	1,102,000

CC.—*Comparative table showing volume and value of the chief articles imported into the German Zollverein, &c.*—Continued.

Articles.	Quantity.						Value.					
	1880.	1881.	1882.	1883.	1884.	1885.	1880.	1881.	1882.	1883.	1884.	1885.
Sheep wool, crude	68,756	77,372	88,502	90,969	105,666	98,790	$49,091,000	$46,036,000	$48,446,000	$47,632,000	$52,812,000	$39,970,000
Shoddy wool, refuse	5,325	5,081	5,596	5,530	4,442	9,259	1,014,000	1,139,000	1,465,000	1,382,000	1,057,000	1,940,000
Wool cleansed	1,890	3,244	3,400	3,409	4,285	5,143	2,479,000	4,246,000	4,046,000	4,057,000	4,691,000	4,651,000
Cotton yarn	13,132	16,475	18,075	21,947	22,140	20,811	9,002,000	10,353,000	12,339,000	13,617,000	13,780,000	11,902,000
Yarn of jute, flax thread	11,144	12,580	13,712	13,190	15,006	16,893	4,130,000	4,511,000	5,635,000	6,557,000	6,672,000	6,794,000
Raw silk	1,948	1,863	2,138	2,452	2,502	1,730	20,867,000	21,276,000	21,427,000	27,720,000	28,287,000	18,181,000
Floss silk	1,323	1,583	1,376	1,188	1,560	1,200	6,090,000	6,729,000	5,767,000	5,221,000	6,623,000	6,507,000
Thread	49	40	39	35	34	40	562,000	461,000	418,000	347,000	326,000	377,000
Woolen yarn	14,920	15,678	16,110	16,901	19,021	19,319	22,160,000	20,297,000	19,893,000	19,154,000	22,228,000	22,803,000
Manufacture of cotton	1,387	1,392	1,477	1,545	1.617	1,544	3,590,000	4,359,000	5,196,000	5,234,000	5,541,000	5,367,000
Webbings of jute, &c., linen, &c	7,276	7,883	8,029	7,163	6,284	4,194	1,992,000	2,138,000	2,198,000	1,961,000	1,720,000	1,148,000
Jute and cotton goods	263	311	302	207	287	294	904,000	1,014,000	1,235,000	1,303,000	1,401,000	1,285,000
Silk goods	293	345	368	330	378	416	4,629,000	5,517,000	6,833,000	6,202,000	7,073,000	8,107,000
Half-silk goods	224	209	218	250	278	302	1,992,000	2,155,000	2,249,000	2,575,000	2,551,000	2,501,000
Wooden goods	3,631	3,094	2,326	2,106	2,038	2,120	6,205,000	5,701,000	4,328,000	3,763,000	3,642,000	3,819,000
Cloths, underwear, and millinery	308	209	278	277	284	300	1,667,000	1,947,000	2,136,000	2,629,000	1,882,000	1,915,000
Caoutchouc, gutta-percha	1,912	1,937	1,999	2,002	2,670	2,366	3,185,000	2,996,000	3,662,000	4,146,000	4,448,000	3,942,000
Oil-cloth, &c	579	812	847	842	876	815	301,000	411,000	442,000	437,000	443,000	429,000
Caoutchouc articles	304	264	279	267	280	291	627,000	560,000	600,000	609,000	575,000	510,000
Railroad cars, &c	150	100	87	269	190	219	52,000	53,000	45,000	44,000	29,000	89,000
Carriages	188	183	185	154	191	190	85,000	83,000	84,000	69,000	86,000	90,000
Furniture	57	55	47	49	44	43	35,000	36,000	31,000	34,000	31,000	29,000
Machines, engines, &c	24,287	26,117	31,853	34,502	39,399	37,147	3,921,000	4,313,000	5,277,000	5,397,000	5,835,000	5,409,000
Musical instruments	355	306	354	366	370	365	244,000	273,000	260,000	268,000	275,000	269,000
Watches	29	28	30	30	34	35	2,798,000	2,684,000	2,896,000	2,859,000	3,216,000	2,971,000
Fancy goods	358	390	367	346	359	416	2,230,000	2,771,000	2,821,000	3,069,000	3,463,000	3,738,000

DD.—*Comparative table showing the volume and value of the chief articles exported from the German Zollverein during the years* 1880–1885.—Continued.

Articles.	Quantities.						Value.					
	1880.	1881.	1882.	1883.	1884.	1885.	1880.	1881.	1882.	1883.	1884.	1885.
Linseed ....tons..	39,551	27,941	28,860	28,249	20,707	11,406	$2,212,000	$1,468,000	$1,305,000	$1,277,000	$961,000	$529,000
White lead ....do...	10,822	13,308	13,277	15,876	17,153	16,833	1,185,000	1,172,000	1,201,000	1,398,000	1,470,000	1,509,000
Ultramarine blue..........do...	5,692	5,420	5,429	5,414	5,450	5,421	1,693,000	1,692,000	1,421,000	1,288,000	1,297,000	839,000
Alizarine....................do...	5,888	5,578	4,535	4,008	4,291	4,284	4,904,000	4,647,000	5,937,000	3,672,000	2,880,000	2,263,000
Aniline dyes ....do...	2,141	2,664	3,114	3,819	4,822	4,646	7,307,000	8,242,000	10,005,000	8,181,000	8,608,000	8,293,000
Painting colors, &c.........do...	1,151	1,311	1,274	1,212	1,523	1,822	829,000	874,000	363,000	346,000	435,000	520,000
Lead and color pencils.....do...	669	668	642	705	683	655	478,000	477,000	468,000	504,000	488,000	545,000
Tars........................do...	11,422	11,404	11,694	12,645	16,605	17,448	408,000	353,000	362,000	391,000	514,000	290,000
Pitch ....do...	10,519	13,478	18,995	24,484	11,200	7,999	369,000	481,000	768,000	1,105,000	583,000	805,000
Cloverseed ....do...	6,638	8,981	7,638	7,045	7,219	11,695	6,038,000	8,981,000	7,658,000	7,045,000	7,219,000	11,695,000
Residues of oil ....do...	36,082	32,478	29,079	35,018	38,504	31,670	1,201,000	1,150,000	1,038,000	1,250,000	1,374,000	1,017,000
Stone coal .... .do...	7,236,466	7,458,248	7,631,617	8,705,000	8,816,935	8,955,629	11,195,000	12,425,000	13,622,000	13,646,000	13,886,000	19,183,000
Coke ....do...	348,408	430,372	478,851	602,138	670,606	633,897	1,328,000	1,741,000	1,985,000	2,221,000	2,075,000	1,886,000
Fire-wood ....do...	187,498	162,440	157,109	177,199	186,708	178,881	1,073,000	927,000	748,000	843,000	889,000	851,000
Potash ....do...	7,771	7,408	7,584	8,901	8,449	9,208	749,000	776,000	807,000	911,000	845,000	766,000
Protoxide and chloride of potassium..................tons..	56,690	75,089	96,205	101,678	77,830	85,085	2,024,000	2,949,000	3,435,000	3,509,000	3,405,000	2,682,000
Tartaric acid..................do ..	906	1,276	1,234	1,352	1,293	1,056	748,000	1,093,000	998,000	1,062,000	1,031,000	804,000
Etherical oils..................do...	164	181	209	186	192	197	605,000	603,000	797,000	621,000	639,000	889,000
Gelatine and glue ....do...	2,132	2,506	2,893	3,525	3,706	3,472	609,000	753,000	964,000	1,216,000	1,279,000	1,032,000
Palm-nut and cocoa oil ....do...	3,135	6,004	9,381	7,506	6,347	8,216	503,000	927,000	1,566,000	1,372,000	1,086,000	1,161,000
Stearine and palmitine acid, tons.	2,693	3,420	3,095	2,913	2,617	702	769,000	692,000	663,000	693,000	685,000	167,000
Glycerine ....tons..	2,332	2,849	2,082	2,467	2,333	2,163	499,000	1,153,000	1,079,000	851,000	584,000	415,000
Candles ....do...	864	929	1,420	1,718	2,589	1,834	271,000	265,000	389,000	510,000	801,000	546,000
Gun-powder ....do...	2,537	2,418	2,201	3,811	3,367	4,278	1,087,000	1,206,000	1,100,000	1,733,000	1,763,000	2,443,000
Matches.........................do ...	1,831	2,566	2,530	2,274	2,201	2,387	392,000	543,000	494,000	298,000	288,000	312,000
Cement, &c.....................do...	211,464	285,032	250,175	309,877	337,632	345,633	2,516,000	2,377,000	2,530,000	2,949,000	3,053,000	2,879,000
Stones..........................do...	506,758	502,197	534,679	568,889	588,879	452,966	5,427,000	5,378,000	5,726,000	2,708,000	2,801,000	2,809,000
Stoneware......................do...	29,567	30,829	32,656	34,065	35,190	34,195	2,217,000	2,539,000	2,606,000	1,863,000	1,827,000	2,021,000
Bricks and tiles ....do...	647,187	669,918	699,171	622,876	608,270	507,255	2,008,000	2,072,000	1,975,000	1,943,000	1,909,000	1,653,000
Clayware.......................do...	34,190	39,561	38,819	40,797	41,086	52,645	2,831,000	3,169,000	3,182,000	3,493,000	3,574,000	3,440,000
Porcelain..................... do...	6,683	8,431	9,246	9,769	10,575	9,866	1,988,000	2,508,000	2,542,000	2,906,000	3,146,000	2,118,000
Hollow glass ....do...	40,170	43,009	48,622	50,616	53,787	52,627	1,721,000	1,842,000	1,972,000	2,289,000	2,302,000	2,129,000
With hollow glass..........do...	7,170	8,149	9,144	11,425	11,906	14,433	1,024,000	1,164,000	1;084,000	1,360,000	992,000	985,000
Zinc............................do...	40,622	59,963	56,478	54,939	58,995	68,482	3,190,000	4,638,000	4,570,000	4,119,000	3,934,000	4,642,000
Copper .... do...	6,478	6,718	6,097	5,781	6,908	5,708	2,128,000	2,206,000	2,081,000	1,848,000	1,972,000	1,824,000
Iron in rods ....do...	145,129	152,605	144,407	148,989	153,964	144,466	5,008,000	4,910,000	4,812,000	4,548,000	4,214,000	3,610,000
Angular iron ....do...	6,676	4,554	3,696	6,903	5,868	17,878	246,000	152,000	123,000	213,000	174,000	489,000
Iron in plates..................do...	37,608	40,938	44,204	52,276	44,085	43,898	1,835,000	1,907,000	2,157,000	2,364,000	1,834,000	1,721,000
Iron ware ....do...	104,775	150,416	227,416	206,668	212,764	198,027	6,982,000	10,624,000	12,449,000	10,829,000	9,309,000	6,018,000
Half manufactures of iron..do...	9,926	19,680	18,436	20,989	14,222	12,449	506,000	915,000	877,000	890,000	608,000	627,000

DD.—*Comparative table showing volume and value of the chief articles exported from the German Zollverein during the years* 1880–1885—Continued.

Articles.	Quantity.						Value.					
	1880.	1881.	1882.	1883.	1884.	1885.	1880.	1881.	1882.	1883.	1834.	1885.
Silk ....tons..	883	988	942	994	1,042	1,120	$9,489,000	$10,820,000	$8,964,000	$8,873,000	$9,303,000	$5,669,000
Threaded silk ....do...	187	193	185	170	214	158	1,935,000	2,207,000	1,979,000	1,819,000	2,035,000	1,270,000
Silk, dyed ....do...	290	241	241	255	289	159	3,313,000	2,585,000	2,005,000	1,972,000	2.129,000	1,887,000
Woolen yarn ....do...	4,957	4,487	5,035	4,814	5,189	5,679	7,723,000	7,014,000	8,098,000	7,305,000	7,647,000	8,625,000
Felt .... do...	713	743	752	814	948	960	1,018,000	1,111,000	1,112,000	1,385,000	1,619,000	908,000
Manufactures of cotton, close tissue ....tons..	13,828	14,460	14,187	13,677	14,978	13,188	10,409,000	11,658,000	14,299,000	13,240,000	14,040,000	11,874,000
Manufactures of cotton, not close tissue.............tons..	504	516	569	501	542	587	1,422,000	1,441,000	1,770,000	1,511,000	1,619,000	749,000
Manufactures of jute and flax, tons	3,878	3,421	3,499	3,349	3,455	3,371	3,656,000	3,163,000	3,551,000	3,350,000	3,532,000	3,217,000
Manufacture of silk ......tons..	393	319	321	317	320	231	6,151,000	4,951,000	5,473,000	5,281,000	5,151,000	3,980,000
Half silk articles ....do...	3,095	3,258	3,737	3,413	4,083	3,875	3,812,000	32,220,000	30,807,000	28,163,000	30,872,000	27,668,000
Cloths, stuffs, plushes .....do...	16,643	18,320	19,170	19,800	21,108	20,455	70,222,000	43,899,000	41,785,000	41,880,000	42,798,000	37,102,000
Cotton hosiery ....do...	5,168	5,426	5,930	6,292	6,836	7,035	8,610,000	11,622,000	14,114,000	14,225,000	16,641,000	14,232,000
Cotton trimmings ....do...	1,457	1,659	2,242	2,039	2,071	2,112	2,080,000	2,567,000	3,468,000	3,184,000	3,204,000	3,018,000
Half silk trimmings ....do...	1,205	1,189	1,106	1,084	894	677	9,657,000	8,829,000	3,463,000	3,702,000	3,896,000	2,261,000
Caoutchouc ....do...	2,057	2,169	2,349	2,461	2,636	2,424	3,286,000	3,508,000	4,059,000	4,434,000	4,337,000	4,933,000
Railroad vehicles...........do...	2,222	3,108	1,702	2,458	1,018	1,071	1,115,000	1,490,000	1,134,000	1,624,000	750,000	718,000
Machines, engines.........do...	63,091	60,601	84,808	92,405	84,307	72,272	10,261,000	10,865,000	14,854,000	15,584,000	13,463,000	11,871,000
Piano forte ....do...	3,626	5,367	6,771	6,742	6,966	6,823	1,898,000	3,129,000	3,931,000	4,011,000	3,979,000	3,897,000
Musical instruments ......do...	2,782	2,946	3,354	3,830	3,895	3,524	3,242,000	3,505,000	3,994,000	4,558,000	4,635,000	4,194,000
Clock movements ....do...	93	97	91	133	147	138	667,000	691,000	649,000	790,000	872,000	594,000
Watches .... do...	6	5	5	5	6	4	666,000	630,000	550,000	642,000	672,000	487,000
Clocks ....do...	1,447	1,431	1,633	1,753	1,790	1,691	1,377,000	1,362,000	1,555,000	1,609,000	1,704,000	1,610,000
Woolen hosiery ....do...	2,026	1,963	2,012	2,219	2,490	2,755	4,912,000	5,605,000	5,740,000	5,808,000	6,222,000	5,901,000
Laces and embroideries ...do...	157	131	162	278	376	504	2,123,000	937,000	1,348,000	2,315,000	3,135,000	5,995.000
Thread laces ....do...	6	5	9	10	12	22	333,000	297,000	524,000	607,000	744,000	1,357,000
Cloths and linen...........do...	4,232	4,518	5,081	5,463	6,390	5,709	18,570,000	10,921,000	22,284,000	21,234,000	24,046,000	20,658,000
Hats of straw, &c ....do...	3,150,592	3,145,091	3,302,554	3,036,963	3,129,431	2,818,093	901,000	935,000	985,000	903,000	931,000	1,149,000
Hats of felt..................do...	164	169	194	247	287	268	781,000	803,000	832,000	1,059,000	1,228,000	1,272,000
Caskets ....do ..	318,688	360,676	406,425	308,515	347,830	368,814	227,000	257,000	291,000	147,000	166,000	162,000
Artificial flowers ....do...	85	97	120	118	103	112	606,000	811,000	855,000	842,000	489,000	848,000
Fire-arms ....do...	544	179	283	486	611	241	772,000	256,000	472,000	810,000	1,017,000	577,000
Manufactures of precious metals ....tons..	78	85	82	97	90	88	9,827,000	10,072,000	9,706,000	11,531,000	11,679,000	10,445,000
Manufactures of cotton, mixed with carded stuffs, &c..tons..	3,492	3,890	4,002	3,557	3,135	3,084	4,084,000	3,240,000	3,810,000	3,386,000	2,884,000	2,887,000

EE.—*Volume of goods imported into the German Zollverein for home consumption from and exported to different countries, &c.*—Continued.

Articles.	Import=I. Export=E.	Russia.	Switzerland.	Remainder of Europe.	United States.	Of all other countries.	Total 1884.		Total 1885.	
							Quantity.	Value.	Quantity.	Value.
		Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*		*Tons.*	
Animals	I.	57,804	10,122	7,767	5	3	205,940	$43,791,000	166,826	$35,693,000
	E.	360	27,208	1	26	4	223,678	38,416,000	183,074	28,503,000
Food, and other articles of consumption	I.	1,310,702	31,064	103,249	132,849	20,665	3,732,906	205,148,000	3,244,858	178,112,000
	E.	5,074	96,000	395	16,165	9,955	1,792,793	111,134,000	1,683,346	98,516,000
Animal food	I.	5,858	4,696	0	5,908	201	228,896	29,260,000	266,275	29,484,000
	E.	2,730	4,570	20	12	25	58,794	13,254,000	57,672	12,007,000
Cereals, pulse, potatoes	I.	1,290,890	3,488	97,736	122,525	15,269	2,963,381	95,125,000	2,451,033	71,852,000
	E.	4,063	45,708	18	7	1,473	249,888	6,090,000	198,140	3,034,000
Mill-ground grain and baker's ware	I.	5,573	678	0	302	1	65,775	4,886,000	82,390	2,108,000
	E.	967	3,649	25	146	57	176,128	9,413,000	173,261	8,584,000
Fruit, vegetables	I.	6,434	20,020	5,198	192	8	177,729	10,311,000	180,509	18,414,000
	E.	937	6,473	6	384	15	178,219	3,271,000	181,611	3,530,000
Table salts and spices	I.	1,605	651	6	9	63	37,561	3,764,000	85,586	3,787,000
	E.	29,145	2,338	29	294	114	237,880	9,348,000	132,170	6,746,000
Coffee, cocoa, tea	I.	19	410	2	692	7,240	126,226	32,039,000	134,751	20,687,000
	E.	1,969	3,642	12	161	25	19,829	911,000	18,823	808,000
Sugar, molasses, sirup	I.	131	17	....	47	230	6,906	525,000	7,129	544,000
	E.	8,082	12,965	165	8,821	1,691	689,212	115,756,000	635,820	40,378,000
Fermented liquors, mineral waters, table oils	I.	33	190	282	87	78	89,399	14,646,000	86,496	12,565,000
	E.	2,153	16,928	105	6,242	5,960	271,677	18,910,000	304,400	19,033,000
Comfits, preserves	I.	20	274	0	15	5	1,061	541,000	1,743	710,000
	E.	48	85	16	79	522	4,341	1,440,000	4,860	1,262,000
Tobacco, and tobacco manufactures	I.	152	49	25	3,012	570	35,382	14,292,000	39,228	15,897,000
	E.	7	645	4	19	53	6,825	2,137,000	7,802	2,218,000
Seed and plants, not for food	I.	53,316	2,051	354	2,286	29,790	388,570	21,594,000	361,844	19,346,000
	E.	7,357	5,909	11	75	88	103,868	6,099,000	101,863	5,962,000
Manure and waste materials	I.	78,904	5,868	366	17,933	11,157	578,282	17,218,000	544,794	1,187,000
	E.	3,262	13,358	12	17,097	15	254,108	4,578,000	131,421	3,194,000

Volume of goods imported into the German Zollverein for home consumption from and exported to different countries, &c—Continued.

Articles.	Import = I. Export = E.	Russia.	Switzerland.	Remainder of Europe.	United States.	Of all other countries.	Total 1884.		Total 1885.	
							Quantity.	Value.	Quantity.	Value.
		Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*		*Tons.*	
Fuel	I.	57,806	2,630	....	171	64	6,019,103	$9,960,000	6,338,489	$10,820,000
	E.	867,758	716,017	4,255	121	609	9,886,111	18,851,000	10,021,460	22,653,000
Raw material of chemical industry	I.	32,761	23,835	2,106	231,507	109,271	1,701,068	93,068,000	1,403,434	83,364,000
	E.	82,806	20,630	1,061	12,187	5,905	465,083	64,846,000	479,042	53,852,000
Salts, acids, sulphur, &c	I.	1,679	1,480	1,629	467	93,991	444,283	20,212,000	442,529	15,323,000
	E.	11,692	15,408	187	2,847	335	222,688	16,676,000	228,577	9,544,000
Tanning stuffs, colors, &c	I.	692	2,021	408	2,831	5,602	196,199	17,707,000	210,884	18,522,000
	E.	11,239	4,431	332	5,877	2,307	110,060	21,817,000	108,407	22,289,006
Ferments, clearing stuffs	I.	9,041	9,619	0	831	59	316,706	2,611,000	27,085	1,419,000
	E.	114	3,891	4	15	0	18,087	856,000	28,162	811,000
Drugs for medicinal purposes, sponges	I.	208	142	0	27	80	7,231	7,958,000	8,728	6,204,000
	E.	637	190	60	166	101	3,071	5,770,000	4,780	5,950,000
Resins	I.	6,823	9,177	11	28,957	7,776	127,613	5,558,000	107,038	5,357,000
	E.	5,491	783	42	2,461	48	41,375	1,713,000	43,478	1,386,000
Mineral and other oils, &c	I.	12,522	608	0	196,650	84	407,112	21,353,000	531,163	21,182,000
	E.	305	1,501	21	22	17	11,257	1,980,000	7,278	1,535,000
Varnishes and lakes, lutes, glutens	I.	34	315	0	15	2	6,827	1,381,000	6,566	1,230,000
	E.	1,082	830	84	243	24	14,109	2,255,000	15,361	2,021,000
Fat oils and fats, not for food	I.	1,680	310	55	1,699	1,390	99,378	14,428,000	101,807	12,016,000
	E.	1,528	1,937	108	477	75	25,104	4,297,000	26,678	3,735,000
Candles, soaps, perfumes	I.	17	41	0	1	1	1,962	718,000	1,989	578,000
	E.	142	394	187	39	536	6,776	5,012,000	5,581	2,321,000
Trimming goods	I.	0	16	0	0	221	1,490	457,000	514	169,000
	E.	482	163	86	19	2,450	7,293	2,831,000	8,467	3,727,000
Raw materials and manufactures of stone and clay industry	I.	45,802	40,398	124	7,154	16,255	1,054,556	11,372,000	1,010,258	12,232,000
	E.	86,789	86,134	2,284	22,844	9,236	2,124,494	28,156,000	2,111,782	24,980,000
Raw materials and manufacture of metal industry	I.	28,925	1,425	1	1,103	3,670	1,888,001	81,108,000	1,846,081	40,474,000
	E.	186,060	55,105	24,057	67,089	72,067	8,127,681	97,023,000	8,003,478	82,412,000

EE.—*Volume of goods imported into the German Zollverein for home consumption from and exported to different countries, &c.*—Continued.

Articles.	Import = I. Export = E.	Russia.	Switzerland.	Remainder of Europe.	United States.	Of all other countries.	Total 1884.		Total 1885.	
							Quantity.	Value.	Quantity.	Value.
		Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*		*Tons.*	
Raw materials and manufactures of the wood-cutting and plaiting industry.	I.	804,257	9,199	47	20,666	8,159	2,008,820	$30,541,000	2,738,600	$34,783,000
	E.	6,427	64,870	558	616	607	650,506	34,657,000	601,863	24,700,000
Raw materials and manufactures of the paper industry	I.	10,958	1,684	....	32	14	48,483	3,211,000	51,026	3,058,000
	E.	3,560	5,370	192	10,346	1,350	154,275	19,846,000	141,660	20,259,000
Raw materials and manufactures of the leather and fur goods industry.	I.	6,056	2,244	37	1,375	2,093	77,716	45,120,000	81,271	39,766,000
	E.	1,400	2,811	296	815	374	32,690	60,668,000	30,622	52,132,000
Raw materials and manufactures of the textile and felt industry.	I.	108,616	9,048	115	38,611	50,696	525,141	243,286,000	538,563	215,[illegible],000
	E.	9,928	9,100	1,454	7,452	4,130	208,438	231,646,000	209,382	209,116,000
Raw materials and manufactures of caoutchouc and wax industry.	I.	28	27	0	26	17	4,233	6,445,000	3,829	5,726,000
	E.	200	103	40	22	41	3,357	5,26[illegible],000	3,376	5,615,000
Railway vehicles, upholstered, carriages and furniture	I.	3	149	....	21	0	1,613	146,000	805	208,000
	E.	28	45	1,031	1	308	8,346	927,000	5,920	1,030,000
Machines, engines, instruments, and apparatus	I.	187	3,050	0	907	1	40,332	11,286,000	38,073	10,462,000
	E.	12,424	3,099	1,982	766	2,853	96,679	32,533,000	86,244	27,567,000
Fancy goods, ornaments	I.	2	18	1	1	1	337	3,437,000	388	4,677,000
	E.	239	107	147	1,100	214	6,984	23,667,000	7,319	18,477,000
Objects of literature and fine arts	I.	130	505	1	26	1	3,715	5,201,000	3,691	5,412,000
	E.	973	763	45	490	72	10,706	13,207,000	11,505	14,719,000
Articles not declared	I.	....	....	....	....	....	....	....	....	....
	E.	7	0	0	1	18	277	203,000	77	101,000
Total	I.	2,659,346	143,318	114,108	454,677	246,766	17,787,760	781,618,000	17,867,830	711,613,000
	E.	719,579	1,113,779	87,780	157,612	107,911	19,151,756	778,117,000	18,814,023	693,831,000

FF.—*Estimates of the expenditures of the German Empire, &c.*—Continued.

For what expended.	Amount.	For what expended.	Amount.
Imperial office of the interior—continued.		Navy department—continued.	
Statistical office	$150,365	Additional allowances for boarding	$148,512
Maintenance of standard measures and weights	24,133	Surgery and medicines	132,600
Board of health	30,892	Traveling, marching, &c	82,586
Patent office	168,123	Instruction	29,750
Board of insurance	47,210	Wharves	3,370,380
	1,845,313	Ordnance	464,195
		Pilotage, tonnage, light-houses	44,625
		Contingent expenses	36,676
War department	81,642,735		8,830,066
Navy department:		Judiciary	463,077
Admiralty	136,683	Treasury department	37,017,259
Hydrographic office	86,009	Railroad department	70,734
German coast survey office	53,669	Department for debts of Empire	4,355,985
Local equipment office	45,125	Auditing and comptrolling tribunal	126,093
Jurisdiction	6,592	General pension fund	5,200,324
Religious service	10,377	Invalid fund of the Empire	6,416,861
Military employés	1,732,003		
Repairs of vessels	1,407,008	Total of ordinary expenditures	147,848,218
Provisions	750,343	Extraordinary expenditures	16,805,370
Clothing	23,015		
Garrisons	189,734	Grand total of expenditures	164,653,588

GG.—*Estimates of the revenues of the German Empire for the fiscal year ending March* 31, 1887.

Source.	Amount.	Source.	Amount.
Customs and taxes	$93,201,205	Interest from invested funds of the Empire	$376,040
Imperial stamp taxes	7,232,106	From deficiency appropriations	11,892,788
Surplus receipts of post-office and telegraph department	6,797,994	Total amount of the quota paid by the several states of the Empire	33,133,979
Surplus receipts of Government printing office	253,637		
Amount of earnings from railways of the Empire	4,247,681	Total revenues	165,979,320
		Total expenditures	164,653,588
From the Imperial Bank	582,505		
Sundries	1,844,524	Excess of expenditures	1,325,732
From the invalid fund of the Empire	6,416,861		

HH.—*Comparative statement, showing the amount of duties on goods imported into the German Zollverein, collected during the years* 1884 *and* 1885.

[Arranged according to the largeness of the amounts.]

Articles.	Amount of duty.		Percentages.	
	1885.	1884.	1885.	1884.
Coffee and coffee substitutes (except chicory)	$11,334,445	$10,636,607	19.70	20.23
Tobacco, manufactures of tobacco	8,243,225	7,443,140	14.33	14.15
Petroleum and other mineral oils, n. o. p. f	7,381,320	6,790,576	12.83	12.82
Grains and other agricultural products	7,267,857	5,751,828	12.63	10.94
Rye	3,144,891	2,176,257	5.47	4.14
Wheat	1,561,307	1,513,002	2.71	2.88
Oats	595,512	880,090	1.09	1.67
Barley	1,090,051	528,407	1.90	1.01
Indian corn	307,642	231,961	0.53	0.46
Wine, &c	3,470,958	3,528,229	6.03	6.71
Wood and other carving materials, and manufactures of	1,558,209	1,052,137	1.38	1.66
Cotton yarn and wads	1,171,345	1,231,818	2.04	2.34
Cattle	1,082,927	838,783	1.88	1.59
Iron and ironware	1,038,531	1,167,182	1.80	2.22
Silk and silk goods	862,922	722,860	1.50	1.37
Lard and grease	848,819	567,185	1.47	1.08
Brandies	796,485	873,720	1.38	1.66
Spices	737,819	698,270	1.28	1.33
Herrings, salted	730,904	686,478	1.27	1.31

HH.—*Comparative statement showing the amount of duties on goods, &c.*—Continued.

Articles.	Amount of duty.		Percentages.	
	1885.	1884.	1885.	1884.
Salt	692, 936	747, 015	1. 20	1. 42
Rice	669, 464	699, 143	1. 16	1. 33
Woolen goods	551, 192	403, 563	0. 96	0. 94
Combed wool, wads, and yarn of wool	547, 890	597, 902	0. 95	1. 00
Flax-seed oil, rape-seed oil, &c	536, 391	521, 595	0. 93	0. 90
Southern fruit, dried	528, 872	525, 331	0. 93	1. 00
Cotton goods	509, 827	531, 528	0. 89	0. 99
Leather and leather goods	429, 574	406, 931	0. 75	0. 77
Tea	395, 199	358, 071	0. 69	0. 68
Linen yarn and thread	369, 911	333, 946	0. 64	0. 64
Fruit, seed, berries, &c., dried, baked, &c	351, 802	329, 457	0. 61	0. 63
Sugar, sirup, and molasses	342, 542	333, 609	0. 60	0. 63
Machines, engines, &c	341, 125	359, 806	0. 59	0. 68
Mill-ground articles and bakers' ware	327, 689	449, 090	0. 57	0. 85
Drugs, medicines, dye-stuffs	297, 919	311, 988	0. 52	0. 59
Cocoa	275, 772	245, 280	0. 48	0. 47
Fancy goods	254, 573	203, 983	0. 44	0. 39
Cheeses	217, 565	207, 703	0. 38	0. 40
Meat, fresh and prepared	211, 251	154, 595	0. 37	0. 29
Linen and linen goods	205, 361	267, 781	0. 36	0. 49
Eggs	198, 710	166, 333	0. 35	0. 32
Clothes, linen underclothing, trimmings	197, 877	177, 211	0. 34	0. 34
Butter, also artificial	193, 494	170, 974	0. 33	0. 34
Glass and glassware	190, 718	176, 573	0. 33	0. 34
Oranges, lemons, &c	169, 749	152, 857	0. 30	0. 29
Preserved articles of consumption	135, 919	172, 510	0. 24	0. 33
Beer	128, 756	133, 647	0. 22	0. 25
Stones and stoneware	122, 335	91, 800	0. 21	0. 17
Paper and pasteboard	114, 362	114, 263	0. 20	0. 24
Manufactures of copper and other not precious metals, n. o. p. f.	103, 635	104, 930	0. 18	0. 20
Caviare and substitutes	93, 016	70, 591	0. 16	0. 13
Codfish, dried	84, 803	37, 571	0. 15	0. 07
Blubber and train oil	81, 460	77, 284	0. 14	0. 15
Oysters and shell-fish, &c	81, 055	49, 209	0. 14	0. 09
Manufactures of clay	79, 939	60, 949	0. 14	0. 11
Cocoa mass, chocolate, &c	79, 794	73, 461	0. 13	0. 14
Starch, &c	73, 301	64, 070	0. 13	0. 12
Manufactures of straw and bast	68, 051	57, 492	0. 12	0. 11
Hops	67, 487	64, 950	0. 12	0. 12
Soap, perfumery	67, 206	66, 364	0. 12	0. 13
Confectionery	66, 031	61, 433	0. 12	0. 12
Palm and cocoa-nut oil	58, 387	51, 977	0. 10	0. 10
Table oils	56, 166	53, 040	0. 10	0. 10
Lees, yeast	51, 676	44, 560	0. 09	0. 08
Oil-cloth, &c	48, 453	53, 171	0. 08	0. 10
Honey	47, 752	22, 632	0. 08	0. 04
Stearine, palmitine, &c	45, 230	72, 144	0. 08	0. 14
Caoutchouc and gutta percha, &c	43, 283	40, 291	0. 08	0. 08
Tallow and animal fats	39, 653	44, 794	0. 07	0. 09
Wax	32, 406	13, 427	0. 06	0. 03
Hair, and manufactures of	27, 846	24, 239	0. 05	0. 05
Pianos and other musical instruments	23, 262	28, 849	0. 04	0. 05
Railroad cars	13, 290	8, 891	0. 02	0. 02
Ropemakers' ware	13, 217	22, 812	0. 02	0. 04
Candles	10, 451	9, 418	0. 02	0. 02
Brushmakers' ware	10, 126	10, 131	0. 02	0. 02
Zinc and zincware	7, 268	7, 152	0. 01	0. 01
Furs	6, 235	6, 455	0. 01	0. 01
Vinegar	3, 677	4, 334	0. 01	0. 01
Tin and tin articles	3, 394	4, 098	0. 01	0. 01
Lead and lead articles	3, 149	2, 415	0. 01	0. 01
Grape sugar, glucose, &c	460	300	....	....
Play-cards	228	414	....	....
Beverage, artificially prepared	274	149	....	....
Wrecked articles	79	546	....	....

II.—*Stamp-tax levied on play-cards in the German Empire (fiscal years* 1880–'81 *to* 1884–'85).

Fiscal year.	No. of card factories.	Play-cards sold.		Subject to tax.		Exported.	
		Sets of less than 37 cards.	Sets of more than 36 cards.	Sets of less than 37 cards.	Sets of more than 36 cards.	Sets of less than 37 cards.	Sets of more than 36 cards.
1	2	3	4	5	6	7	8
		Sets.	*Sets.*	*Sets.*	*Sets.*	*Sets.*	*Sets.*
1880–'81	64	3,432,300	1,039,300	3,231,500	246,900	200,700	792,400
1881–'82	61	3,289,300	942,500	3,110,000	238,200	179,300	704,300
1882–'83	60	3,204,300	1,058,800	3,106,000	233,400	158,300	825,400
1883–'84	61	3,346,000	1,236,100	3,151,000	208,700	195,600	1,027,400
1884–'85	61	3,529,000	1,278,400	3,292,100	203,500	236,900	1,074,900

Fiscal year.	Imports.		Total sets subjected to tax (exclusive of columns 5+9 and 6+10).		Tax collected.	
	Sets of less than 37 cards.	Sets of more than 36 cards.	Sets of less than 37 cards.	Sets of more than 36 cards.	Total.	Per capita.
1	9	10	11	12	13	14
	Sets.	*Sets.*	*Sets.*	*Sets.*		*Cents.*
1880–'81	25,500	5,600	3,257,000	252,500	$262,600	5
1881–'82	16,000	6,100	3,126,000	244,300	252,200	5
1882–'83	15,800	7,100	3,121,800	240,500	251,500	5
1883–'84	22,000	7,000	3,173,000	215,700	252,200	5
1884–'85	16,000	8,900	3,308,100	212,400	261,300	5

KK.—*Area, population in* 1885, *and yearly average of increase of population since* 1871.

States.	Area (exclusive of parts of seas), square kilometers.	Population December 1, 1885.	Yearly average of increase of population.		
			1871–'75.	1875–'80.	1880–'85.
Prussia	358,257,100	28,318,833	1.01	1.16	0.74
Bavaria	75,863,500	5,416,180	0.80	1.02	0.49
Kingdom of Saxony	14,992,900	3,179,168	1.92	1.48	1.34
Kingdom of Wurtemberg	19,503,700	1,995,168	0.85	0.93	0.24
Baden	15,081,100	1,600,839	0.77	0.82	0.30
Hesse (Grand Duchy)	7,680,300	956,170	0.90	1.14	0.43
Mecklenburg-Schwerin	13,303,800	575,140	0.18	0.82	0.07
Saxe-Weimar	3,592,600	313,668	0.58	1.10	0.26
Mecklenburg-Strelitz	2,929,500	98,371	0.34	0.94	0.33
Oldenburg	6,420,200	341,250	0.37	1.10	0.22
Brunswick	3,690,400	372,580	1.20	1.29	1.29
Saxe Meiningen	2,468,400	214,697	0.86	1.25	0.72
Saxe-Altenburg	1,323,800	161,129	0.65	1.22	0.77
Saxe-Coburg-Gotha	1,968,100	198,717	1.16	1.28	0.41
Anhalt	2,347,400	247,603	1.21	1.70	1.25
Schwarzburg-Sonderhausen	862,100	73,623	0.11	1.05	0.70
Schwarzburg-Rudolstadt	940,400	83,939	0.38	0.92	0.80
Waldeck	1,121,000	56,565	0.67	0.64	0.08
Reuss, Elder Line	316,400	53,787	1.03	1.55	1.15
Reuss, Younger Line	825,400	112,118	0.93	1.84	2.03
Schaumburg-Lippe	339,700	37,204	0.82	1.31	1.01
Lippe	1,222,000	123,250	0.29	1.34	0.49
Lubeck	297,700	67,658	2.18	2.21	1.26
Bremen	255,600	166,392	3.74	1.94	1.29
Hamburg	409,800	518,712	3.41	3.09	2.67
Alsace-Lorraine	14,508,100	1,563,145	0.29	0.45	0.06
German Empire	540,521,300	46,840,906	1.00	1.14	0.70

LL.—*Report on the average condition of the German banks of issue during the year 1885.*

Name of the bank.	Liabilities.				Assets.							
	Stock capital.	Reserve fund.	Notes in circulation.	Total liabilities.	Specie on hand.	Treasury notes on hand.	Notes of other banks on hand.	Bills of exchange.	Collaterals.	Stock and bonds.	Other assets.	Total assets.
Imperial Bank	$28, 560, 000	$5, 030, 844	$179, 112, 374	$268, 765, 308	$138, 727, 344	$5, 287, 220	$3, 485, 034	$92, 529 640	$14, 820, 022	$9, 975, 532	$6, 217, 592	$271, 036, 304
Municipal Bank of Breslau	714, 000	142, 800	620, 228	2, 337, 874	247, 996	2, 618	99, 246	1, 144, 066	878, 220	....	10, 710	2, 382, 856
Private Bank of Cologne	714, 000	178, 500	488, 852	2, 190, 314	182, 308	4, 284	85, 414	1, 807, 134	109, 956	4, 284	90, 678	2, 235, 058
Private Bank of Magdeburg	714, 000	143, 752	556, 060	1, 623, 636	211, 344	4, 998	80, 692	877, 030	247, 758	219, 674	15, 232	1, 636, 718
Private Bank of Dantzic	714, 000	178, 500	674, 968	3, 264, 170	240, 856	238	131, 852	1, 580, 320	500, 990	73, 304	829, 068	3, 357, 228
Province of Posen Bank	714, 000	178, 500	392, 938	1, 542, 954	136, 850	238	5, 206	1, 012, 928	304, 640	....	110, 670	1, 570, 562
Bank of Hanover........	2, 856, 000	285, 124	1, 167, 152	6, 563, 564	422, 926	27, 896	65, 450	3, 954, 370	268, 940	179, 214	1, 650, 768	6, 563, 564
Bank of Frankfort.......	4, 080, 034	930, 104	2, 430, 932	9, 351, 496	924, 110	38, 586	164, 458	5, 861, 940	629, 986	1, 114, 078	839, 902	9, 564, 030
Bavarian Bank of Issue.	1, 785, 000	236, 096	15, 286, 978	20, 334, 720	7, 846, 622	21, 896	784, 068	10, 775, 212	496, 944	64, 736	347, 242	20, 334, 720
Saxon Bank of Dresden .	7, 140, 000	938, 672	10, 343, 480	21, 250, 068	4, 243, 302	105, 424	1, 898, 764	12, 831, 770	668, 066	48, 314	1, 454, 418	21, 250, 068
Clearing-House Bank of Leipzic	714, 000	53, 550	670, 446	1, 973, 258	243, 950	4, 284	132, 566	1, 007, 930	339, 864	15, 470	229, 194	1, 973, 258
City Bank of Chemnitz	121, 380	30, 266	120, 428	995, 078	49, 742	2, 380	20, 468	752, 080	30, 940	31, 416	108, 052	995, 078
Wurtemberg Bank of Issue	2, 142, 000	128, 282	4, 598, 160	7, 203, 170	2, 055, 606	6, 188	193, 732	4, 603, 634	97, 818	84, 014	162, 078	7, 203, 070
Bank of Baden	2, 142, 000	361, 284	3, 001. 418	5, 803, 392	1, 095, 772	4, 998	33, 706	4, 124, 778	160, 696	8, 092	421, 260	5, 803, 392
Bank of South Germany	3, 729, 936	413, 168	3, 576, 188	7, 963, 528	1, 272, 348	4, 046	130, 662	4, 837, 826	209, 916	970, 326	537, 404	7, 962, 528
Bank of Brunswick ...	2, 499, 000	94, 486	585, 718	4, 208, 792	154, 224	3, 570	38, 556	2, 245, 768	538, 594	....	1, 249, 500	4, 230, 212
Bank of Commerce of Lubec	571, 200	22, 372	151, 368	1, 722, 406	72, 590	1, 666	50, 694	1, 060, 052	113, 526	138, 992	322, 728	1, 760, 248
Bank of Bremen........	3, 952, 466	203, 490	959, 616	8, 949, 230	353, 906	1, 190	32, 606	7, 632, 898	478, 618	386, 036	206, 822	9, 092, 076
Total	63, 863, 016	9, 549, 750	224, 745, 304	376, 042, 380	158, 422, 796	5, 509, 700	7, 382, 284	158, 639, 376	20, 890, 494	13, 313, 482	14, 803, 838	378, 970, 970
Uncovered notes........	....	....	53, 435, 284	....	....	....	....	....	....	....	....	....

MM.—*European railways.*

Country.	Length.	Area.	Total population.	Population per square kilometer.	Number of inhabitants per kilometer of railway.
	Kilometers.	*Sq. kilos.*			
German Empire	35,749	540,522	45,862,000	15,100	1,283
Austria-Hungary	20,535	622,309	38,800,000	30,300	1,889
Russia	23,940	5,016,024	83,909,945	209,500	3,504
Finland	1,181	373,604	2,142,093	316,300	1,814
Sweden	6,600	442,818	4,603,595	67,100	697
Norway	1,562	318,195	1,916,000	203,700	1,226
Denmark	1,817	38,283	2,028,000	21,000	1,116
Great Britain and Ireland	30,058	313,844	35,611,816	10,400	1,184
Netherlands	2,118	33,000	4,225,065	15,600	1,995
Belgium	4,320	29,455	5,720,807	6,800	1,324
Luxemburg	366	2,587	209,570	7,000	572
France	29,469	528,572	37,672,048	17,900	1,278
Switzerland	2,798	41,346	2,889,826	14,800	1,032
Spain	8,257	507,036	16,902,621	61,500	2,046
Portugal	1,520	92,829	4,708,178	61,100	3,097
Italy	9,602	286,588	29,010,652	29,800	3,021
Greece	22	64,688	2,018,978	2,940,400	91,771
Bosnia and Herzegovina	370	52,102	1,184,000	140,800	3,200
Bulgaria	222	63,972	2,007,919	288,100	9,044
Roumania	1,513	131,402	5,376,000	86,800	3,553
European Turkey	1,178	209,722	5,500,000	178,800	4,669
Whole Europe	183,186	9,708,898	332,299,113	52,900	1,814

WORKINGMEN'S COLONIES.

In my last annual report I took occasion to call attention to so-called workingmen's colonies, established for the purpose of correcting the evil of tramping. The number of such colonies has been increased by one, in Schneckengrün, Saxony. The entire number of colonies in Germany is stated to be fifteen, and the number of persons remaining October 31, 1886, in the different stations, 1,553. It must be borne in mind, however, that during the year thousands found shelter and employment.

The colonies in Hanover, now three years in operation, admitted, within the last three years, 1,192 persons.

The receipts, mostly the result of local contributions, reached 83,682.47 marks; the expenditures, 82,333.79 marks; the average expense for each person, inclusive of pay for his work, amounted to about 1.15 marks per day.

In other colonies the expenses did not exceed 55 pfennigs per day; one in Danelsberg managed to support people at 33½ pfennigs per day, after deducting pay for work. It is said that the colonies are in a prosperous condition, and receive much encouragement from charitably disposed persons. Several new colonies are under contemplation.

Rev. von Bodelschwingh, a well known clergyman of Bielefeld, is the originator of the "workingmen's colonies."

CONCLUSION.

My report shows conclusively that Germany, encouraged by fifteen years of peace, and forced by its increasing population and the demands of the times, applies all of its industrial levers, not only to hold its own, but, if possible, to excel its numerous competitors in the world's market. The disciplining forces of the Government, more or less centralized, give every possible aid, and the twofold object of fostering industry and trade, and to augment the tax-paying ability of the nation, is clearly discernible. Still, it is feared that the uncontrollable spirit of competition neutralizes in many directions positive success; and while sales and exports make a tolerable fair showing, this is chiefly attributable to low wages and the consequent possibility of underselling foreign competitors.

And here permit me to interline, that undervaluations are practiced not merely with a view of defrauding our revenue, but also to drive objectionable competitors out of the market, making it more difficult every day to consuls to ascertain correct market values; not to mention the numerous failures (bankruptcies), which frequently cause a glut in certain articles of manufacture and a corresponding depreciation of prices.

I notice a feverish anxiety to produce cheap goods, and if much of the latter, notwithstanding our high tariff, can be sold in the United States, with greater or smaller profits, it demonstrates the fact that German goods are in demand more on account of their cheapness than quality.

Germany is more than ever dependent upon foreign markets for the disposal of its manufactures. Its protective policy may secure to it the advantages of the home market, though my statements show that the anticipated rise, as, for instance, in grain and many other articles of home origin, has not been realized. On the contrary, my report shows that the general effect of the protective policy is far from having met all the anticipations of its advocates.

My foregoing report treats trade affairs from a strictly objective standpoint and presents the same under the light of present observations.

I cannot say, though it is evident, that in the great strife among the nations, especially of Europe, a permanent commercial policy must be considered as doubtful. There is a drifting tendency in all directions, and positive calculations as regards the future impossible. The factors at work on this side of the Atlantic are of so conflicting and uncertain a character that a report can only treat upon present appearances.

F. RAINE,
Consul-General.

UNITED STATES CONSULATE GENERAL,
Berlin, January 10, 1887.

MAYENCE.

Report of Commercial Agent Smith.

The reports of the various chambers of commerce in this neighborhood for the year 1885 having been recently published, I have the honor to herewith make to you my annual report for the present year based thereon and upon information drawn from other sources.

GENERAL SITUATION.

Money is cheap, prices are low, profits are slight, competition is severe, and overproduction is the cry. Such is the designation to be applied to the general state of trade in Germany at the present moment, so far as I am informed respecting it. The stock companies have almost all declared lower dividends than in the preceding year; the machine and tool industry is said to have few orders; workers in brass and bronze, manufacturers of paper, soap, toys, and hardware, the spinners and weavers, as well as the makers of wearing apparel, all complain of poor business. The iron industry is in a very depressed state; for several years past it has been keeping up under very discouraging conditions, and now it has reached that pass when wholesale discharges of workmen have to be made. Few failures in the commercial and industrial centers appear to take place, but there is a general cry of unprofitable business. Prices during the present year have been the lowest they have been for seven or eight years, but some improvement in them seems to be just now taking place. Since 1880 there has been a gradual decline of prices in almost all the leading articles of merchandise, in wheat, rye, barley, oats, sugar, coffee, rice, cotton, wool, and so on, in some a marked decline. The average price of wheat during the year 1880, for instance, as reported by the statistical bureau at Berlin, was 230.7 marks ($54.90) per 1,000 kilograms (2,204 pounds); during 1885 only 168.4 marks ($40). Raw sugar brought during 1880 per 100 kilograms (220 pounds) 65.3 marks ($15.54); in 1885 but 49 marks ($11.66). On all articles of luxury the steady sinkage of the rate of interest and the consequent rise in value of all safe securities paying good rates of interest of course exerts a bad effect, as the capitalist's income thus becomes limited, and his expenditures more carefully made.

The opponents of the present tariff attribute all their ills to increased customs duties—to protection; but the customs duties imposed by the Government are moderate, viewed from an American standpoint, when taken all in all. High duties are ruining trade, they say, and raising up barriers of non-intercourse with other nations; they are making all the countries of the world our commercial enemies, and bringing down upon us years of industrial depression. But at the same time that this is being said, the English are exclaiming, as will appear from their press, "Look at the indefatigable Germans! See what giant strides they are making in the direction of commercial supremacy! Behold the progress they have made in the last few years! Trade languishes with us; our furnaces are being shut up and our mills closed, all largely due to the thrift and perseverance of the plodding Germans. They are looking abroad upon the world as a field and jostling us out of our markets by their energy and push; in our own island home, even, are we not safe; but behold them with stolid assurance selling their wares cheaper than our own, and filling our commercial houses with the young men of the Fatherland, who speak a polyglot tongue, to the exclusion of the young bloods of Britain, who are familiar with but the one their mothers taught them."

Business is said to be very much depressed in England, and this condition is largely due, it is claimed by many there, to German competition. The Germans, the English say, are content with smaller profits than they are, speak all languages, have clerks who work for lower wages, and are bound to no old, useless traditions. They are with their goods wherever there is a demand for them, and where there is no demand they do their best to create one. Of the entire imports into England, Germany furnishes about £25,000,000 I believe; the United States about £90,000,000.

COMPETITION WITH FRANCE, OR INDUSTRIAL DEVELOPMENT OF GERMANY.

And upon this subject what do the French have to say? M. Amedée Marteau was awhile ago directed by the French minister of commerce and industry to study the industrial development of Germany during the last ten years and make a report thereon. This report is now published, and a review of it which appeared in the London Times of the

20th ultimo I think should be incorporated in this report, and I therefore give the whole of it, word for word, as follows:

M. Amedée Marteau, who was lately charged by the French minister of commerce and industry to study the industrial evolution of Germany during the last ten years, has presented a striking report on this subject. After referring to the uneasiness and excitement created in France by the rapid development of German industry, and the severe competition of between German and French goods, not in foreign markets only but in France itself, M. Marteau says that this change in Germany became apparent in 1877. Up to that date German industry was passing through a transformation period, a period of slow and difficult preparation, during which even the most competent observers were deceived. Between 1872 and 1877 the balance of the foreign trade of the German Empire was largely adverse to it. In 1872 this balance of trade showed against Germany 972,000,000 marks; in 1874 this increased to 1,441,000,000, and in 1877 it was 1,101,000,000. Up to this last date German industry was preparing, but had not yet entered upon the scene; the Germans improved their old or created new machinery, they perfected their appliances, they placed themselves abreast with progress, and soon found themselves able to compete with the best manufactories abroad. Properly speaking, says M. Marteau, it was only in 1878 that Germany engaged seriously in the struggle. In 1877, as has been said, the German Empire imported 1,101,000,000 marks more than it exported. In 1880 the balance was reversed and was in favor of exports; but it is only fair to remark that this year was a very unfavorable one for foreign trade with Germany, for the new customs tariff, called the autonomous tariff, was applied then and large stocks of foreign goods had been accumulated in anticipation of the higher duties of this tariff. But the imports, which between 1874 and 1877 varied between 3,673,000,000 and 3,877,000,000 marks, declined steadily down to 1884, when they amounted to 3,284,900,000 marks, while the exports, which in 1874 were 2,532,800,000 marks, had increased in 1884 to 3,269,400,000 marks, an average increase for each of the ten years of about 80,000,000 marks. Thus, as German imports have steadily decreased while exports have increased, Germany is now manufacturing much which she formerly purchased abroad, and is, besides, sending abroad manufactures which she never sent before.

Whatever opinion may be entertained respecting the balance of a country's foreign trade, adds M. Marteau, it would be idle to deny that the growth of German exports, especially in the last five years, at such a rapid rate is a remarkable fact, which should fix the attention of economists and of those whose duty it is to watch the great movements of trade. This evolution manifested itself immediately in the commercial relations between Germany and France. Up to 1877 the latter sent Germany more than it received. In 1877 the balance in favor of France was 77,000,000 francs; but in 1878 Germany sold France more than it bought from her. In 1880 the balance in favor of Germany was 75,000,000 francs, and in 1884 89,000,000. Thus, in ten years a difference of 166,000,000 francs has been produced in the Franco-German trade, French exports to Germany having fallen from 486,000,000 to 328,000,000, while imports from Germany have in the same period risen from 349,000,000 to 417,000,000; in other words, France sells Germany 158,000,000 worth less than she did ten years ago and buys 68,000,000 worth more. The idea, therefore, that France is refusing to buy German products is the reverse of correct. The following short table will show the change:

Trade between France and Germany 1875–'83.

Years.	Exports from Germany to France.	Exports from France to Germany.	Difference in favor—	
			Of German exports.	Of French exports.
	Francs.	*Francs.*	*Francs.*	*Francs.*
1875	349, 000, 000	426, 900, 000		77, 900, 000
1876	389, 000, 000	431, 200, 000		42, 200, 000
1877	372, 800, 000	395, 100, 000		22, 300. 000
1878	418, 500, 000	343, 700, 000	74, 800, 000	
1879	413, 000, 000	313, 500, 000	69, 500, 000	
1880	438, 200, 000	361, 900, 000	75, 300, 000	
1881	454, 700, 000	383, 000, 000	71, 700, 000	
1882	476, 500, 000	338, 800, 000	137, 700, 000	
1883	461, 700, 000	326, 000, 000	135, 700, 000	
1884	416, 900, 000	327, 900, 000	89, 000, 000	

It is especially the export of manufactured articles that has improved by this movement. This export has been more than doubled in the ten years 1874–'84, as will appear from the following figures. The export of manufactured articles from Germany was:

Years.	Amount.	Years.	Amount.
	Marks.		*Marks.*
1874	841,800,000	1880	1,436,700,000
1877	942,200,000	1884	1,730,000,000

In the figures chemicals, manufactures, and drugs are not included, as the German official statistics do not place these under manufactured articles. M. Marteau then examines these figures under their main heads, with a view of ascertaining where the main increase in German manufactures has been. The following short table shows this in a striking manner:

Foreign trade of Germany, exports of the principal manufactured articles from 1874–'84.

Articles.	1874.	1877.	1880.	1884.
	Marks.	*Marks.*	*Marks.*	*Marks.*
Pottery, porcelain, glass, and crystal	48,800,000	31,600,000	67,500,000	79,400,000
Metal work, iron, copper, zinc, lead, tin (except precious metals)	51,600,000	78,600,000	136,000,000	276,700,000
Machines, implements, instruments, &c	79,200,000	72,000,000	94,200,000	130,700,000
Skins, hides, and their manufactures	43,500,000	63,900,000	87,400,000	134,500,000
Tissues of all sorts, cotton, wool, silk, &c	369,300,000	418,600,000	675,900,000	708,700,000
Paper and pasteboards	20,400,000	28,300,000	52,800,000	65,700,000
Ironmongery, bijouterie, art objects	38,400,000	49,300,000	75,400,000	99,400,000
Total	651,200,000	742,400,000	1,189,800,000	1,501,400,000

Without entering into numerous details, which would make his report too long, M. Marteau says it is clear from his own observation, as well as from the reports of the French consuls at various German centers, that the Germans are everywhere displaying great activity, and that they hesitate at no sacrifice. In many places the industries are of recent creation, and the machinery and implements are therefore of the latest and best kind. Hence he cannot understand how some economical writers believe that Germany is now passing through an intense and dangerous commercial crisis. The truth, he thinks, is that German manufactures, encouraged by the rapid and unexpected development of exports, have produced more than they can find a ready market for. But, then, overproduction is a frequent incident in the course of trade, and cannot be said to be of a nature to produce, in this instance, a great commercial disaster.

As for the causes of this great development of German trade, M. Marteau refers to the cheapness of certain articles vital to manufacture, such as coal, iron, and wood; the cheapness of labor; the diffusion of capital by means of banks and similar institutions; the spirit of enterprise which is exhibited by so many German merchants, which leads them to establish agencies all over the globe, where they push their wares with untiring energy and perseverance; and, finally and principally, to the commercial and industrial schools of all kinds, which are increasing day by day throughout the Empire. There are now more than 250 of these establishments in Germany, where young men are initiated into the practical and technical knowledge necessary for the industrial careers which they are about to embrace. The textile and metallurgical industries especially are well taught in these technical schools. M. Marteau dwells at some length on the immense mechanical value of these institutions, and says that, owing to them, Germany possesses in an almost equal degree with England that organization so indispensable for every industrial nation, viz: A body of cultivated and zealous merchants who do not hesitate to exile themselves to remote and little-known countries, as readily as they go to the great centers of the world's commerce, in order to seek these outlets for the national industry. In this respect he thinks France is conspicuously and lamentably deficient.

The German mercantile marine is also growing year by year in proportion to the trade of the country. It is unnecessary here to enter into the details which he gives, beyond the following figures: In 1880 the steam merchant navy of Germany numbered 374 vessels; in 1885, 509. The tonnage of 1880 was 196,343 tons; of 1885, 410,063 tons, or more than double. In 1880 the average number of tons per ship was 523; in 1885, it was 800. Germany now carries under her own flag about 50 per cent. of her trade, and M. Marteau believes that this must constantly increase. After giving some details respecting the prices of coal and iron, the report refers to the price of labor. Speaking generally, the writer thinks that in no part of the world do wages adjust themselves so readily and smoothly to the necessities of competition—that is to say, the workmen accept more easily than elsewhere the relations required by rigorous competition. Difficulties often arise between masters and workmen, but they are fewer and more easily and promptly settled than similar disputes elsewhere. German workmen also live on less than the French, and their wages are therefore less. This is an important item in the consideration of the rapid growth of German industry.

COMPETITION AND OVERPRODUCTION IN GERMANY.

Germany is now simply disturbed, in my opinion, by the present universal business depression and by overproduction. Her tariff may be higher than ever before, but her people buy their food and their raiment cheaper. Competition is too keen in the Empire, and the industrial establishments continue to pour out their goods, notwithstanding the great hue and cry of overproduction that is raised. They talk day and night of overproduction, and yet the man who dares propose a general shortening of the hours of labor and prohibition of work on Sundays becomes a target for the critics. There was much talk last winter about a normal day's work and of prohibiting Sunday labor, but the general feeling was too strong against it, and yet nearly every chamber of commerce and almost every business man in the country is constantly sighing over overproduction. The fierce competition reduces prices to a minimum. Cheap money enables the large establishments to go on producing and extending, while the smaller concerns are forced to the wall, and the business of the many becomes that of the few. That is now said to be the case in Germany. There is an increased production, and consequent intenser competition in all branches of business, leading to an enlargement of the big establishments and limitation and annihilation of the small ones. The purchasing power of the consumer, however, it is maintained, does not thereby become increased, as the rate of interest on money is becoming ever less. The farmer is not benefited, as he, notwithstanding the new protective duties on his products, must sell them at greatly reduced prices. Neither is the merchant, who finds his sales diminished by reason of the capitalist and farmer receiving lower incomes. Nor does the manufacturer profit by it; nor the great mass of workingmen, whose wages, in consequence of the fierce battle for existence, the industrial establishments are unable to raise. While the production increases the consumption remains the same, the market continues stocked and prices keep falling. High duties may perhaps protect the land against the surging world around it, but what is going to protect it against the intense rivalry among its own children?

EFFORTS FOR FOREIGN MARKETS.

Great efforts are being made to procure for the Empire profitable foreign markets, especially as by increased customs duties or other protective regulations the exportations to old markets have been rendered more difficult. The subsidizing of steamships, the reform of the consular service, and the protection which the Government affords to colonial undertakings are all in this direction. Germany, however, cannot expect to do a flourishing business until the industrial situation improves in France, the United States, and other countries. Until then must Germany be content to maintain the place it has lately taken, and go slowly forward. Germany's condition is less unfavorable than that of some other countries; and it is a hopeful sign for Germany that the Germans, who formerly stood behind other nationalities in the race for the commerce of the world, now take a more advanced and assuring position, with a prospect of overreaching their competitors. "In union is strength," they are every day perceiving more and more.

As in industrial circles, so among the merchants are increased competition, low prices, and unsatisfactory profits to be noted. A change is taking place, it is said, in the manner of distribution of the producer's products into the consumer's hand. The middle-man is being pressed steadily out of the field, and the wholesale dealer is coming into closer relations with the very small dealers and with consumers. The consumers are often bound together in co-operative societies, and draw their needs from the manufacturers or importers directly, without the interposition of a medium.

WORKINGMAN'S SITUATION.

But although business is in an unsatisfactory state, it does not seem to affect the workingman greatly. Wages remain pretty much the same, and few discharges of hands take place. The stagnant state of the market only serves to make the necessaries of life cheaper, and to enhance the purchasing power of the laborer's money. This is a gratifying feature in the general depression.

GRAIN AND FRUIT CROPS.

The grain and fruit crops of the year were excellent, both in quantity and quality, but the farmer had to sell at very low figures, and found in the produce of his land but little profit. The increased duties on grain brought him little or no relief so far as prices were concerned, unless it kept out foreign exports to an extent to make salable at a fair price what would have had to yield to foreign competition or been forced down to a still lower figure. Agricultural distress prevails throughout Europe, but the German Government considers, I believe, that it is less sensibly felt in Germany than in other countries of Europe. However that may be, the German farmers have to struggle hard to hold their own. Without some sort of protection, the indications now are that they are to be overwhelmed in the future by the rich harvests of Russia, India, and the United States. Every rail laid in Russia or in India renders the transportation of grain easier and cheaper, and tends to force its value downward. The lowering of the taxes on the Suez Canal and the cheapening of ocean freights challenge America to a severe competition in the markets of Europe. What is the European farmer going to do about it? He is confronted by a monster of which his forefathers never dreamed. He has either to abandon the raising of grain altogether on a large scale and turn to other pursuits, or be protected by walls of non-intercourse, or reverse the whole system under which he has been holding and cultivating his land for centuries, and adopt methods which will enable him to battle with his dangerous foes. This last mentioned it is claimed he can do in time, but not all of a sudden, and while doing so must be protected by the Government of his country until the change is accomplished. But "necessity is the mother of invention," it is said, and there is nothing like the logic of hard, disagreeable experience to teach a man the decadence of the old, and the necessity of something new. The protection of the Government probably only keeps the individual at the old methods, and delays his conversion.

FARMERS.

The trouble with the large farmers of Germany is that they have paid too dear for their land. They are heavily in debt, and, according to of sugar instead of 12½, as formerly, but the Government continued to grant a drawback on the basis of 12½. The export drawback thus became an enormous premium to the producers, and the German sugar manufacturers have been able to supply all Europe with cheap sugar, till to protect themselves different states had to increase their duties on foreign sugar. The industry has bloomed and astonishing dividends been paid. But the large profits at last led to overproduction and a crisis in the trade, and the export bounty cost the German Government about $5,000,000. A new law has been passed this year remedying the old to some extent. Under it, from August, 1886, the tax on sugar is to be 1.75 marks (41½ cents) per 100 kilograms (220 pounds). The export drawback upon the same quantity of raw sugar of at least 90 per cent. polarization and upon refined sugar of 90 to 98 per cent. will be 18 marks ($4.28) for the first year, and afterwards 17.25 marks ($4.10). On candies and on sugar in white hard loaves, blocks, and bars, the drawback is 22.20 marks ($5.28) for this year and 21.25 marks ($5.05) hereafter. On all hard sugar and on all white dry sugar in crystal, crumb, or flour form of at least 90 per cent. polarization the bounty is 20.80 marks ($4.95) to August, 1887, and 20.15 marks ($4.79) thereafter.

SUBSIDIZED STEAMSHIP LINES.

Last year it was the steamship subsidy measure, in connection with colonial undertakings, that was the great topic of discussion. This has given place somewhat to the brandy-monopoly agitation, but is still a subject of great interest to the German nation. On June 30 last the first steamer of the new East Asia line was duly gotten off from Bremerhaven, with such ceremonies as were to be expected on such an occasion, and was received at and dispatched from Antwerp with corresponding éclat, making the trip from Bremerhaven to Antwerp in twenty-two hours, a gain of eight hours over the usual time; and on July 14 the first boat of the new Australian line was sent off. The ships of the first line have a speed of 11 knots an hour, so that the post from Berlin to Asia requires thirty to thirty-one days to reach Hong-Kong and thirty-four to thirty-five to get to Shanghai. Those of the Australian line have a speed of 11½ knots an hour. The post will be carried from Berlin to Adelaide in thirty-four days, to Melbourne in thirty-seven, and to Sydney in thirty-eight. At Hong Kong a branch line is to connect, extending to Corea, and at Sydney the line is to connect with one which is to touch the Tonga and Samoan Islands. The choice of Antwerp as a stopping place is very favorably regarded by the people of the Rhineland, as the ships of the Rhine can easily connect therewith. Rotterdam was, however, preferred as being the most accessible to Rhine vessels. Antwerp was chosen in preference to Rotterdam, as it was considered that the water at Rotterdam was not deep enough for the draught of the best steamers.

TRANSATLANTIC GERMAN BANK.

Closely related to steamship subsidizing and colonial enterprises is the project of founding a transatlantic bank by the Government which shall have branch establishments in foreign parts and deliver German merchants from dependence on England. By enabling German merchants to draw directly upon German banking places, they can be made independent of England, but it can only be accomplished by creating a central bank with branches in different countries. Such a bank, if firmation of the urgers of the new customs duties to the contrary that the measure would raise the price of this article. The farmers thus gained nothing by the act, unless it prevented a still further decline, and enable them to sell more readily the yield of their lands. The hard sorts of wheat, however, which the millers must obtain from abroad, which used to cost about the same price as the wheat of the Bavarian Palatinate, now cost 1 mark (23 cents) to 1.50 marks (35 cents) per 100 kilograms (220 pounds) more. The barley of the Palatinate, which before the new tariff act was exported in large quantities to England and Holland, was pressed to the wall there in the past year, it is said, by barley from France and Austria-Hungary. Whether the new duties availed the farmers anything is a disputed point; those friendly to the measure claiming that they do; those opposed to them, of course that they do not help them in any way. However, there has been a great falling off, according to the bureau of statistics at Berlin, in the amount of grain imported during the first three months of 1886, as compared to the corresponding period of other years. The farmers are not satisfied with the increased duties given them last year on cereals, but clamor for still higher ones. These the Government seems not disposed to grant them very soon, if at all.

On wool, too, the farmers want a duty imposed, as sheep husbandry is represented to be in a woful state in the Empire. This they will hardly get. Although it might prove to be very beneficial to the agriculturists, it would be a blow to the whole woolen trade, which could not have an export bounty granted it corresponding to the quantity of wool used in manufacturing. A duty on wool, it is thought, would so seriously cripple the entire woolen industry that it could only be regarded as a blow at the well-being of the German nation. Germany exported in 1861 woolen yarn and goods amounting in value to about $65,000,000, and this industry would be put in jeopardy by a duty on wool, for the native wool is said to form but one-fifth part of the whole amount employed in manufacturing.

VINTAGE.

The vintage last year was poor, and did not repay the vine-dressers for their labor and care. In many cases the costs of cultivation were hardly covered. The wine of 1885 is a racier wine than that of 1884, but sourer. Both in quantity and quality was the vintage a failure. The specific weight of the must from ordinary vineyards in Rhenish Prussia did not go beyond 75 to 80 degrees Oechsle, while the acidity reached 12 to 14 per cent. But a small quantity of this wine, it is said, can be used by the trade unmanipulated, while the great part of it must be improved in flavor by artificial methods. This year, so far as quality is concerned, the outlook is very unfavorable. In the matter of quantity the vintage will be one of the poorest for years. With regard to quality it is yet too early to make trustworthy predictions.

Small batches of phylloxera are discovered from time to time in the vineyards. Eight herds have been found this year in the vineyards of Rhenish Prussia, I believe.

The manufacture of German champagne, or sparkling wine, meets with continued success. The sale of native champagne has considerably increased since the imposition of higher duties on French champagne, and the better qualities of German sparkling wine are pressing the cheap French brands more and more out of the German market.

short time ago an English firm underbid all the German firms for a delivery of iron rails at Altona 25 per cent. In Italy and Roumania the Germans are also said to be underbidden by the English and Belgians. The German journal *Stahl und Eisen* (Steel and Iron), in commenting on this rivalry, says that if English firms succeed in competing with German works in their own country they will be placed in a worse position than they are now in, and refers to the competitive struggle going on between the English and German works as one of life and death.

Articles made of cast iron were in active demand last year, and their manufacture was more profitable than that of most other articles in the iron trade. Prices were better, but not enough so to make business thoroughly profitable. They could only prevent further losses. Bar-iron reached the lowest price ever known, and stood at 100 marks ($23.80), and even lower.

LEAD AND ZINC.

With lead and zinc the result was better than with iron. Lead had been very flat for a long time, and in 1885 an improvement manifested itself. There was an increased production of zinc ore in Germany in 1885, but of lead less. For both there was a good demand. Prices followed the movement of the metal market and rose somewhat in the second quarter of the year, but not enough to cause the mines which had been lying idle to resume work. Says the Chamber of Commerce at Coblenz, in substance:

> The demand for soft lead was very active throughout 1885. Large stocks of finished lead were seldom on hand at the furnaces, and at times the production was hardly equal to the demand. Nevertheless, in the early part of the year prices fell and went down to as far as 20 marks [$4.76] per 100 kilograms [220 pounds] at the works. About the middle of the year prices rose, being in July 23½ marks [$5.59], then went down 1 to 1½ marks in the autumn of the year, but again picked up and closed at the end of the year to 24 and 24½ marks the 100 kilograms [$5.71 to $5.83]. The market still continues active. There was an increased production of hard lead, but apparently no increase in consumption.
>
> There was less zinc produced. The market was gratifying, but prices went gradually down during the first six months of the year, and stood in June below 26 marks [$6.18] per 100 kilograms at the furnaces. Then a combination was formed, after much labor, into which nearly all the furnaces of Europe entered, and the agreement adopted that after 1885 the quantity of zinc produced should be limited to that of 1884. This had an immediate effect upon the market, so that by the end of the year the price had risen to 29 marks [$6.90] per 100 kilograms. As the combination has been formed for a long period of time and the consumption of zinc seems to gradually increase, a further rise in price is to be expected.

Raw zinc is now quoted at 28½ to 30 marks ($6.78 to $7.14).

COPPER.

Copper was lower in price. The increased production in foreign countries is said to forbid a hope of improvement in prices.

TIN.

White tin was affected by overproduction in England. Combinations in England during a part of the year brought about an improvement in prices, but as they were not lasting prices declined again. The average price for tin at Hamburg during 1885 was 193.3 marks ($46) against 184.9 marks ($44) per 100 kilograms in 1864.

vach-leather croupons for use as machine belting and those for use in manufacturing shoes. With a very little fat vach-leather can be made to have the appearance of oiled leather without injuring it as sole-leather. At the same time a great injustice which is being done to the German makers of leather belting for machinery would be remedied. This industry now suffers from foreign competition just as before 1879 the sole-leather did.

CHEMICALS.

The chemical works still complain of falling prices. Customs duties in France, the United States, and Russia have materially reduced importations from Germany. Quite a number of the German chemical works have erected branch establishments on this account in foreign lands, by which the loss in exportations is made up to a certain extent.

ANILINE COLORS.

In aniline colors business is said to be dragging, with low prices. Almost all raw materials have become cheaper; especially was this the case with benzol, which at the close of 1885 stood cheaper, at a price scarcely ever reached before since the creation of the aniline industry.

PETROLEUM.

Petroleum was low in price. In the fall of 1885 the chancellor of the Empire suggested to the Bundesrath that on petroleum-barrels in future a duty of 10 marks ($2.38) be levied as coopers' articles, as these barrels were coming into competition with those of German coopers, which was accordingly done. Respecting the imposition of this duty the Chamber of Commerce at Weisbaden thus expresses itself:

> The Bundesrath, contrary to the laws of the Zollverein, has ordered the levy of a duty on petroleum-barrels as fine coopers' articles in addition to the existing gross duty, which duty is to be refunded on the re-exportation of the barrels. This is done on the ground that the cooper business suffers from the enormous importation of these barrels. But it must be urged that the American petroleum-barrels do not come into competition with the barrels of our coopers. They are so cheap in price and their durability is so great that they can be used for many purposes to which barrels cannot generally be applied, and in default of them recourse must be had to other articles for use in packing. They can hardly be done without, and our native coopers are unable to offer any substitute for them, as our barrels are far too dear and less durable.

LARD.

Lard was lower in price. Much lard is imported from America, but the larger part of it is supposed to be used in the manufacture of artificial butter.

IMPORTS AND EXPORTS.

The imports of the Empire amounted in value in 1885 to 2,944,431,000 marks ($700,774,578), exclusive of gold and silver in bullion and coin, or 316,368,000 marks ($75,305,000) less than in 1874, and the exports to 2,860,257,000 marks ($680,741,166), or 344,682,000 marks less ($82,034.000) than in 1884; but the gross weight of the articles imported amounted to 17,867,291,000 kilograms, against 17,787,720,000 in 1884, and the exports to 18,813,869,000 kilograms, against 19,151,636,000 in 1884. This shows a decrease in exports amounting in value to 410,000,000 marks ($97,580,000) since 1883. In value the exports of 1885 are the lowest of any year since 1880, being in the following relation from 1880 to 1885, viz, 2.90, 2.98, 3.19, 3.27, 3.20, and 2.86 billion marks; and in imports pretty much the same exhibit manifests itself, viz, 2.84, 2.96, 3.13, 3.26, 3.26 and 2.94 billion marks. The decrease is due, according to the opponents of the Government's financial policy, to retaliatory tariffs, brought about by the protective system adopted in Germany, France, Russia, Austria-Hungary, Italy, Spain, &c.

The average prices of meat, flour, &c., in this Duchy during the same years per pound, 1 German pound being half a kilogram, or 1.1 pounds English, were as follows:

Articles.	1885.	1884.	Articles.	1885.	1884.
	Cents.	*Cents*		*Cents.*	*Cents.*
Beef	$31\frac{7}{8}$	$32\frac{3}{8}$	Rye flour	$6\frac{7}{8}$	$6\frac{7}{8}$
Veal	$25\frac{9}{10}$	$26\frac{3}{8}$	Rye bread	$5\frac{3}{8}$	$5\frac{3}{8}$
Mutton	$26\frac{3}{8}$	$27\frac{3}{8}$	Butter	$44\frac{9}{16}$	$47\frac{3}{8}$
Wheat flour	$9\frac{3}{8}$	$9\frac{3}{8}$	Pork	$27\frac{1}{16}$	$27\frac{3}{16}$

SANITARY STATISTICS.

According to the census taken December 1, 1885, the population was then 956,200 souls. During the year 1885 the number of deaths in the Dutchy, according to the official report, was 21,570, exclusive of still-births, or 22.56 per 1,000 inhabitants, against an average of 21.12 in 1884, and an average of 22.26 from 1880 to 1884. Of the deceased, 5,537 were children less than one year old, and 3,900 children from one to fifteen years old. From infectious diseases of all kinds there were altogether 2,084 deaths; 624 from measles, 619 from diphtheria and croup, 270 from whooping cough, 230 from scarlet fever, 148 from typhus and nervous fevers, 97 from erysipelas, 86 from child-bed fever, and 10 from diarrhœa. From consumption, 2,789 persons died, and to acute inflammation of the breathing organs 2,342 yielded. Apoplexy claimed 626 victims, of suicides there were 237, and of deaths through accident 275. Catarrh of the stomach and diarrhea accompanied by vomiting occasioned 1,063 deaths.

METEOROLOGY.

The lowest point reached at Mayence by the thermometer during the year 1885 was on December 12, when it stood at —13.6° Réaumur, the highest on June 29, when it was at +25.4° R. The average temperature during the months of December, 1884, January and February, 1885, was +1.99° R.; during March, April and May, 1885, +7.52° R.; during June, July, and August +14.84° R.; during September, October, and November +7.47° R. The number of icy days, the greatest temperature being 0° R., were 13; the number of frosty days, with minimum temperature under 0° R., were 76; the number of summer days, with a maximum temperature of 20° R. or more, were 48; the number of rainy days were 151; the number of snowy days, 16; the number of rainy and snowy, 5; the number of foggy days, 55; and the number of days on which thunder-storms occurred were 15.

EMIGRATION.

The emigration from Hesse in 1885 was 2,503 persons, against 3,175 in 1884.

JAMES HENRY SMITH,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Mayence, January 8, 1887.

As to the following crops, the latest attainable statistics are those of the year 1883:

Articles.	Quantity.	Articles.	Quantity.
Oats ....bushels..	15,591,497	Potatoes ....bushels..	16,286,620
Peas, beans, and lentils..........do....	5,035,920	Flax.........................pounds..	39,522,802
Fave, lupins, and chick peas ...do....	7,131,120	Hemp ....do...	161,856,646

In amount, the crops for 1885, so far as the statistics are attainable, do not materially differ from those of 1884 with the exception of the wine crop, in which there has been an increase of 152,416,378 gallons. There has been a very slight increase in the oil, the orange, lemon and citron, and the chestnut crop, but the remaining crops show a small decrease.

Little has been said by the Italian authorities during the last year of the phylloxera, and it has to a large extent disappeared from Italy. During the last year the peronospora has attacked a large proportion of the Italian vineyards, but its ravages have been checked by a liberal use of lime.

Much damage was done to the crops in Northern and Central Italy in the early autumn of 1885 by floods and hail. The rains began nearly a month earlier than usual and lasted until January.

FISHERIES.

During 1885 there were employed in the various fisheries, including coral and sponge fisheries, 16,851 vessels and small boats, of an aggregate tonnage of 49,182 tons. By far the greater part of the tonnage consisted of small boats engaged in fishing in the harbors and bays of Italy. Of the whole number 15,904 vessels and boats of 41,411 tons were engaged in fishing in Italian waters, and 947 vessels of 6,634 tons were engaged in fishing in foreign waters. In 1884 there were employed in the Italian fisheries 48,359 men and boys. In 1885 the number had increased to 49,728, an increase of 1,369.

Italian fisheries in 1885.

Description.	Boats.	Tonnage.
	No.	*Tons.*
Fisheries..	16,573	47,278
Coral fisheries..	216	790
Sponge fisheries..	63	1,114
Total	16,851	49,182

Total men and boys employed, 49,728.

MINES.

No statistics of the Italian mines for 1885 are obtainable. The latest statistics are those for the year 1884. So far as can be learned from unofficial sources there has been a very slight increase in the number of mines worked during 1885, but no noteworthy increase in the total production.

was 84,173, and it is probable that the yearly increase since 1883 has been at least as large.

In the various schools for secondary instruction of which I have obtained the statistics for the scholastic year 1883–'84, there were in that year 58,984 pupils, an increase since 1882 '83 of 1,441.

In the technical schools there were 33,399 pupils, being a decrease since 1882–'83 of 420. In the school of the mercantile marine there were 825 pupils, being ten less than in the previous year.

There are in Italy 21 universities, of which 4 are free; and 21 superior institutes. The number of students and of persons attending lectures in these institutes, was, in 1884, 15,710, or 840 more than in 1883.

Finally, there are the schools for special instruction. These include the military, naval, agricultural, and mining schools, and the Government conservatories of music and fine-art schools. The following statement shows the number of these schools and the number of pupils attending them:

Special instruction in Italy.

Schools.	1883.		1884.	
	Schools.	Pupils.	Schools.	Pupils.
Government schools of fine arts	14	3, 140	14	3, 083
Government musical conservatories (including school of recitations in Florence)		973		912
Military schools	7	2, 503	9	2, 865
Naval academy		167		184
Engineers' (naval) academy		155		149
Agricultural schools and colonies	49	1, 151		1, 151
Mining schools		93		118
Industrial and commercial schools	103	16, 271		(*)
Total		24, 453		8, 462

* No return obtainable for 1884.

There were thus, according to the latest statistics, about 2,500,000 children and young persons receiving instruction in public and private schools in Italy. This, of course, does not include the very large number of children of the more prosperous classes, who receive their instruction at home.

CRIME.

There has been during the year 1885 a decrease in crime which is very creditable. In 1884 there were 119,980 crimes committed or denounced to the authorities, and 24,793 convictions for crimes of all sorts. In 1885 there were 113,194 crimes committed or denounced, being a decrease of 6,786, and there were 24,101 convictions, being a decrease of 692.

To a very large extent the homicides committed or attempted in Italy are the result of the practice of carrying concealed weapons. The number of cold-blooded, premeditated murders is comparatively small, and homicides, as a rule, are committed in the heat of sudden passion. The Italian authorities are making earnest efforts to put an end to this unlawful carrying of weapons. No one is permitted to carry a pistol without a permit from the police, and in no circumstances is any one allowed to own, much less to carry, a pistol smaller than a certain prescribed length, which is about that of the Navy Colt's revolver. This fact, were it known, would save American tourists from the annoyance of having the smaller pistols which they occasionally carry in their luggage confiscated. As to dirks, bowie-knives, and sword-canes, they are of course prohibited.

The following statement shows the number and character of crimes committed and denounced, and of corrections for crime in Italy in 1885:

Crime in Italy in 1885.

Character of crimes.	Crimes committed.		Crimes of which criminals were corrected.			
			By correctional tribunals.		By courts of assizes.	
	1884.	1885.	1884.	1885.	1884.	1885.
Homicides:						
Committed	1,378	1,270	224	116	1,240	1,114
Attempted	1,470	1,475	116	76	271	267
Infanticides:						
Committed	272	....	....	....	63	67
Attempted	25	....	....	....	7	1
Assault and battery	49,086	43,126	11,196	9,275	312	394
Robbery and extortions:						
With homicide	113	136	25	12	60	77
Without homicide	1,972	1,956	88	168	466	344
Theft:						
Qualified	34,284	34,118	9,604	6,166	1,069	1,079
Simple	31,385	31,113		4,866	51	79
Total	119,960	113,194	21,353	20,679	3,539	3,422

EMIGRATION.

The increase in emigration from Italy steadily continues. In 1884 the total emigration from Italy was 147,017. In 1885 it was 157,193, being an increase of 10,176. Of this total, 59,395 emigrants went to South America and 13,096 to North America. Of the latter, 12,485 went to the United States and 611 to Canada. In 1884 the emigrants to the United States numbered 10,583 and those to Canada 265. The increase of emigrants to the United States in 1885 has therefore been 2,249 and the increase to Canada 346.

The emigration to Africa in 1885 was 6,217 as compared with 3,754 in 1884, being an increase of 2,463. This comparatively large increase has been chiefly in the direction of Algeria. On the other hand, emigration from Italy to European countries has decreased from 87,558 in 1884 to 78,232 in 1885, a decrease of 9,326.

The following statement shows in detail the direction of emigration from Italy in 1884 and 1885:

Emigration from Italy in 1884 *and* 1885.

Destination of emigrants.	1884.	1885.	Destination of emigrants.	1884.	1885.
Canada	265	611	Algiers	1,636	3,423
United States	10,582	12,485	Egypt	850	1,194
			Tunis	637	818
Total emigration to North America	10,847	13,096	Other African countries	631	782
Argentine Republic	31,927	37,710	Total emigration to Africa	3,754	6,217
Uruguay	947	1,497			
Paraguay	1,142	847	Asia	65	96
Brazil	6,116	12,311	Oceanica	178	158
Other American countries	4,488	7,029			
Total emigration to South America	44,620	59,394	Total emigration to non-European countries	59,459	78,961
			Emigration to European countries	87,558	78,232
Total emigration to North and South America	55,467	72,490	Grand total	147,017	157,193

RAILWAYS.

The statistics of the Italian railways for 1885 have not yet been published.

The total length of Italian railways on December 31, 1883, was 6,001 miles. On December 31, 1884, the total length was 6,292 miles, being an increase of 291 miles. The working expenses in 1883 were $28,626,93 as compared with $30,618,526 in 1884, being an increase of $1,991,599. The receipts in 1884 were $41,032,560 as compared with $39,784,247 in 1883, being an increase of $1,248,313. The surplus of receipts over expenses was $11,157,317 in 1883 and $10,414,034 in 1884.

The total cost of all the railway lines (including rolling stock) on December 31, 1884, was $554,887,406. This gives an average cost (excluding cost of rolling stock) per mile of $79,617.

There was in the possession of the Italian railways the following rolling stock in 1883 and in 1884:

Rolling stock.	1884.	1883.
Locomotives	1,913	1,[illegible]
Passenger cars	5,616	5,[illegible]
Other cars	31,740	30,[illegible]

The number of miles run by passenger cars in Italy in 1884 was 15,382,000, and by freight and construction cars 13,642,000, making a total mileage of 29,024,000. This was an increase over the mileage of 1883 of 2,489,447 miles. In 1884 the Italian railways carried 36,358,791 passengers.

Italian railways are nearly all single-track roads, but they are managed with very great care and collisions are almost unknown. The cost of the roads has been very great owing, to the conformation of the country. Railways can be carried from the west to the east coast only by tunneling the Apennines and by steep grades, while the greater part of the coast lines from Ventimiglia to Spezia and from Naples to Cape Spartivento is a succession of tunnels. The interior of Sicily and Sardinia being mountainous has also made the construction of railways in those islands very costly.

Within the last two or three years a great number of steam tramways have been built in Italy. These roads usually follow the line of an existing ordinary road, and the trains consist of three or four cars of about the size and very nearly the pattern of American street horse-railway cars. They are cheaply built and operated, and as the Government does not class them as railways, they pay no taxes on freight and passengers.

Length of railways in Italy in 1884.

Companies.	Length.	Companies.	Length.
	Miles.		*Miles.*
Upper Italy	2,469½	Sardinian	[illegible]
Roman	1,073	All others	[illegible]
Southern	1,073		
Calabrian-Sicilian	925¼	Total	6,[illegible]

Receipts and expenses of Italian railways in 1884.

Receipts.	Amount.	Expenses.	Amount.
Passengers	$15,750,429	Working expenses and repairs	$8,558,102
Freight	24,619,408	Administration	2,658,406
Miscellaneous	662,723	Traffic	9,888,805
		Rolling stock	9,513,213
Total	41,032,560	Total	30,618,526

Length of steam tramways in Italy in 1884.

Provinces.	Length.	Provinces.	Length.
	Miles.		*Miles.*
Piedmont	403⅝	Rome	33
Lombardy	438	Campania	20
Venetia	66	Puglio	40¾
Emilia	91¼		
Tuscany	57⅛	Total	1,150¼

The extent of these steam tramways curiously corresponds with the enterprise and industry of the respective Italian provinces.

TELEGRAPHS.

Extent of telegraph lines and telegraphic business in Italy in 1884, *the statistics for* 1885 *not being as yet obtainable.*

Length of wires ... miles	64,425	Private dispatches sent in the Kingdom	5,652,278
Length of lines ... do	18,242	Private dispatches sent to other countries	568,271
Length of submarine cable ... do	116¼	Government dispatches sent	456,303
Number of officers	3,227	Dispatches received from abroad	664,501
Employés	5,958	Dispatches in transit	174,937
Machines	2,027		
Semaphoric stations	30		

The receipts of the Italian telegraphs during 1884 were $2,392,016, of which $1,939,574 was received for private telegrams.

The total expenses were $2,020,911, showing a profit of $371,105. The charge for telegrams in Italy is 1 lira (equivalent to 19.3 cents) for fifteen words, and 5 centesimi (equivalent to 1 cent) per word for every additional word. The machines in use are the Morse and the Hughes machines.

POSTS.

In 1884 the number of letters carried by the Italian post-office was 143,250,000. On June 30, 1885, the end of the fiscal year, the number of letters that had been carried during the year was 159,678,226, being an increase of 16,428,226. The number of postal cards carried during the same fiscal year was 35,521,098, and the number of newspapers was 173,250,108. There was a large increase in the number of newspapers as compared with the number carried in 1884, which was 108,726,706. This increase, which amounted to 64,523,402, is an indication of the rapid and continued growth of journalism in Italy. This increase, however, by no means represents the whole increase in the circulation of newspapers, for in all the cities the local newspapers are for the most part distributed by carriers or sold by news venders.

Receipts of the Italian post-office in 1885.

Sources.	Amount.	Sources.	Amount.
Postage stamps sold	$5,338,164	Miscellaneous receipts	$625,578
Postal cards sold	720,025		
Stamps for marking short-paid letters	671,755	Total	7,355,522

Italian postal savings banks.

Business done.	In 1885.	Since the opening of postal savings banks in 1876.
Bank-books issued	285,372	1,457,513
Bank-books canceled	93,766	250,579
Deposits	1,743,588	7,809,585
Deposits withdrawn	883,311	3,636,056
Amount of deposits	$27,509,497	$124,959,149
Amount of deposits withdrawn	23,079,472	94,736,390

Italian postal operations from July 1, 1884, *to June* 30, 1885.

Number of post-offices in the Kingdom on June 30, 1885	3,980
Number of Italian post-offices outside of Italy	6
Number of letters and manuscripts posted	159,678,226
Number of postal cards posted	35,521,008
Number of newspapers, &c., posted	173,250,166
Number of postal packages posted	4,374,264
Postal orders given out:	
Number	4,542,132
Value	$106,136,782
Postal orders paid:	
Number	4,963,581
Value	$112,502,658
Total receipts of post-office	$7,355,522
Total expenses of post-office	6,408,452
Balance	947,070

In 1884 the total receipts of the Italian post-office were $5,917,551 and the total expenses $5,351,786, showing a profit of $565,765. In 1885 the receipts were $7,355,522 and the expenses $6,408,452, showing an increase balance on the side of profit of $947,070.

A comparison of the sums deposited in the postal savings banks since their institution in 1876, with the deposits withdrawn during the same period, shows that ordinarily the postal banks have a substantial sum of money in their charge. The excess of deposits over withdrawals in 1885 amounted to no less than $4,430,025, and the total amount of money deposited since 1876 was greater than the amount of the deposits withdrawn by $30,218,579.

No change has been made in the rates of postage by the Italian post-office within the past year.

THE ARMY.

The Italian army as at present organized consists of 2,119,250 officers and men of all arms. It is divided as follows:

	Officers and men.
Permanent army	750,765
Militia	341,250
Territorial militia	1,021,954

There are drawn every year for service in the permanent army about 106,000 men, who serve from three to five years, according to the branch of the service in which they are enlisted. They then serve from nine to seven years in the militia, after which they pass into the territorial army. A certain proportion of the permanent army is always, in time of peace, absent from the colors on indefinite furlough, excepting a few weeks in each year when they are recalled for drill. In the territorial army are also included all able-bodied men between the ages of twenty and forty who are not exempted from military service for special reasons, or who do not belong either to the permanent army or the militia.

It should be said that the territorial army is every year improving in numbers and discipline, as it continues to receive old soldiers from the militia. The men of the territorial army go into barracks every year for two weeks, and I am glad to say that the four Roman battalions which have just performed their annual two weeks' service present the appearance of well-disciplined regular troops rather than that of what we are accustomed to regard as militiamen.

The Italian permanent army and the militia (which corresponds to the German Landwehr) are in a high state of efficiency. The officers are thoroughly educated men, and in all that pertains to military science they are as well instructed as the Prussian officers. The men are well disciplined, neat, and cheerful fellows, and as soldierly in their appearance as any soldiers in Europe. Italy has spent a great deal of money in her army, but the money has given as its return a splendid army, that can be fully trusted to defend the country against any invaders.

At present the infantry is armed with the Vetterli breech-loader, but this weapon is to be immediately converted into a magazine-rifle holding eight cartridges. The navy is already furnished with this converted weapon, which has given entire satisfaction.

THE NAVY.

There has been launched during the year 1885 only one man-of-war of much importance. This was the Morosini, which was built at Venice. She is a vessel of 11,000 tons displacement, and is built of steel. She is to carry armor of 45 centimeters in thickness, will be armed with four guns of 43 centimeters caliber and two of 15 centimeters, all breech-loaders, and her engines are to be of 10,000 horse-power. Two other vessels of precisely the size and character of the Morosini are in course of construction.

BOOKS.

There were published in Italy in 1885 6,908 books and pamphlets other than periodicals. The number published in 1884 was 6,214, and the increase was therefore 694. Of these 6,908 books, 6,671 were in the Italian language, 31 were in Italian dialects, 108 were in Latin, 72 in French, and 26 in other languages.

The greatest number of books of any one department published in 1885 was 719 theological works. Next come belles-lettres, to which department belonged 632 books. There were also published 523 books on history and cognate sciences, 513 books on medical and veterinary science, 449 books on political economy and finance, and 371 on government and jurisprudence. There were published in Italy in 1885 1,459 periodicals.

COINAGE.

Money coined during each year since the establishment of the Kingdom of Italy.

Year.	Gold.	Silver.	Bronze.	Total.
1862	$5, 521, 490	$404, 970	$5, 440, 755	$11, 367, 215
1863	14, 767, 221	6, 191, 994	1, 544, 000	22, 503, 215
1864	2, 349, 305	6, 040, 569	....	8, 389, 874
1865	13, 260, 104	8, 867, 952	....	....
1866	757, 721	6, 919, 596	3, 860, 000	11, 537, 317
1867	1, 106, 483	3, 190, 317	7, 969	4, 304, 771
1868	1, 813, 932	241, 723	3, 352, 029	5, 407, 684
1869	715, 470	3, 855, 412	....	4, 570, 882
1870	211, 412	5, 761, 481	....	5, 972, 893
1871	90, 818	6, 948, 037	....	7, 038, 855
1872	12, 738	6, 873, 100	....	6, 885, 838
1873	3, 967, 999	8, 658, 869	....	12, 626, 868
1874	1, 142, 448	11, 580, 000	....	12, 722, 448
1875	433, 176	9, 650, 000	....	10, 083, 176
1876	415, 850	6, 166, 690	....	6, 582, 540
1877	954, 956	4, 255, 319	....	5, 210, 275
1878	1, 224, 639	1, 737, 000	....	2, 961, 639
1879	565, 358	3, 860, 000	....	4, 425, 358
1880	409, 997	....	....	409, 997
1881	3, 254, 088	1, 208, 346	....	4, 462, 434
1882	26, 927, 946	1, 103, 652	....	28, 031, 598
1883	785, 027	1, 352, 046	6, 864	2, 143, 937
1884	62, 165	2, 121, 951	2, 785	2, 186, 901
1885	169, 165	134, 626	9, 650	313, 441

The great increase of coinage in 1882 was due to the necessity of preparing for the resumption of specie payments.

Entries and clearances at all Italian ports in 1884 and 1885.

Description.	Entered.				Cleared.			
	1884.		1885.		1884.		1885.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
International commerce.								
Sailing vessels:								
Italian	8, 633	660, 803	8, 910	711, 976	7, 879	669, 780	8, 374	693, 234
Foreign	2, 461	354, 855	2, 612	437, 399	2, 586	376, 652	2, 665	418, 355
Steamers:								
Italian	869	754, 448	937	741, 447	806	666, 226	888	695, 427
Foreign	3, 866	3, 446, 146	4, 453	4, 012, 160	3, 886	3, 516, 302	4, 384	3, 856, 957
Total:								
Italian	9, 502	1, 415, 251	9, 847	1, 453, 423	8, 685	1, 336, 006	9, 261	1, 388, 661
Foreign	6, 327	3, 801, 001	7, 065	4, 449, 559	6, 472	3, 892, 954	7, 049	4, 275, 312
Total	15, 829	5, 216, 252	16, 912	5, 902, 982	15, 157	5, 228, 960	16, 311	5, 663, 973
Coasting trade.								
Sailing vessels:								
Italian	68, 912	2, 145, 961	74, 057	2, 328, 857	69, 279	2, 075, 476	74, 006	2, 353, [illegible]
Foreign	327	67, 870	347	71, 806	241	47, 494	187	44, [illegible]
Steamers:								
Italian	15, 741	6, 160, 493	17, 773	6, 834, 338	15, 794	6, 189, 522	17, 797	6, 820, [illegible]
Foreign	3, 560	3, 127, 103	3, 962	3, 303, 325	3, 516	3, 124, 579	4, 033	3, 469, [illegible]
Total:								
Italian	84, 653	8, 306, 453	91, 830	9, 163, 195	85, 073	8, 264, 998	91, 803	9, 174, [illegible]
Foreign	3, 887	3, 194, 973	4, 309	3, 375, 131	3, 757	3, 172, 073	4, 220	3, 514, [illegible]
Total	88, 540	11, 501, 427	96, 139	12, 538, 326	88, 830	11, 437, 071	96, 023	12, 689, [illegible]

RECAPITULATION.

Items.	Vessels.	Tonnage.
Entered and cleared in 1884	208, 356	33, 383, 710
Entered and cleared in 1885	225, 383	36, 799, [illegible]
Increase in 1885	17, 029	3, 716, [illegible]

Entries and clearances at all Italian ports of vessels exclusively engaged in the deep-sea fisheries in 1884 and 1885.

Year.	Entered and cleared.	Tonnage.
1884	3,525	29,393
1885	2,869	20,264
Decrease	656	9,129

Entries, clearances, and tonnage of vessels under foreign flags for the year ending December 31, 1885.

Flag.	Entered and cleared.	Tonnage.
English	9,717	9,043,346
French	4,621	3,418,901
German	1,010	495,462
Austrian	2,850	610,674
Greek	1,769	491,636
United States	51	29,170
All other foreign flags	2,625	1,225,582
Total	22,643	15,614,771

In 1884 the number of entries and clearances of vessels under foreign flags was 20,443, with a tonnage of 14,157,991, showing an increase in 1885 of 2,250 entries and 1,456,780 tons.

Number and tonnage of United States vessels entering at and clearing from the five principal Italian ports in 1885.

Ports.	Arrivals.		Departures.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Catania	2	1,309	1	518	3	1,827
Genoa	5	4,340	5	4,340	10	8,680
Messina	1	525	......	....	1	525
Palermo	2	742	2	742	4	1,484
Savona	2	713	2	713	4	1,426
Total	12	7,629	10	6,313	22	13,942

In 1884 the total number of United States vessels so entering and clearing was 18, with a tonnage of 10,400. There has been an increase of 4 entries and clearances, with an increase of 3,542 tons.

According to Italian authority, the trade between Italy and America was carried on in 1885 under the following flags:

Flags under which the trade with the United States and Canada was carried on for the year ending December 31, 1885.

Flag.	Entered.			Cleared.		
	Number of vessels.	Tonnage of vessels.	Freight.	Number of vessels.	Tonnage of vessels.	Freight.
			Tons.			*Tons.*
With cargoes:						
Italian	168	120,878	126,295	118	73,742	73,54[illegible]
American	6	3,489	4,604	14	7,177	2,26[illegible]
Austrian	11	6,931	8,530	7	4,765	4,7[illegible]
French	20	36,025	14,360	39	52,116	15,9[illegible]7
German	5	2,812	3,731	4	2,637	2,582
English	106	48,432	51,586	173	204,693	191,2[illegible]4
All others	14	7,538	9,059	10	5,398	6,272
Total	330	226,105	218,165	365	350,528	305,5[illegible]
In ballast:						
American	4	2,442	....	2	742	....
Italian	1	516	....	65	37,413	....
All others	8	1,451	....	54	48,779	....

During the year 1884, 148,281 tons of freight were entered and 305,684 were cleared in vessels trading between Italy and the United States. While the number of tons of freight cleared from the United States in 1885 was only 93 tons less than in 1884, the increase in the number of tons entered was greater by 69,884.

Grouping the results together we find the following results:

Items.	Number of vessels.	Tonnage.
Increase in 1885 over 1884 of entries and clearances at all Italian ports	17,029	3,716,[illegible]
Increase of entries and clearances under foreign flags	2,250	1,456,7[illegible]
Increase of entries and clearances of vessels under the American flag	4	2,542
Increase of freight brought from the United States	....	69,884
Decrease of entries and clearances of vessels engaged in deep-sea fisheries	656	2,13[illegible]
Decrease of freight cleared for the United States	....	93

On the whole there has been a substantial increase of the commerce of Italy in 1885, whereas in 1884 there was a serious decrease as compared with 1883. The failure of the tunny fishery in 1885 is to a large extent the cause of the decrease in that year of the Italian deep-sea fisheries.

MERCANTILE MARINE.

Number and tonnage of merchant vessels launched in Italy in 1885.

Number of ship-yards where vessels were launched	39
Number of vessels	197
Tonnage	10,728
Value of hulls	$564,825 00
Average value of each vessel	2,873 50

The number of vessels launched in 1884 was 140, with a tonnage of 15,273. There has thus been an increase in the number of vessels and a decrease in the number of tons. The value of the vessels launched in 1884 was $964,195, from which it appears that there has been a decrease of $399,370 in the value of the vessels launched in 1885.

There were launched in 1885, 3 steamers of an aggregate tonnage of 574, and 194 sailing vessels of an aggregate tonnage of 10,154. But one vessel of more than 400 tons was launched during the year. There were on January 1, 1885, in construction in Italian ship-yards 3 steamers and 56 sailing vessels.

Number and tonnage of sailing vessels belonging to the Italian mercantile marine in 1885.

Size.	Number of vessels.	Tonnage.	Size.	Number of vessels.	Tonnage.
1 to 10 tons	2,323	14,465	501 to 600 tons	205	114,121
11 to 30 tons	1,648	28,274	601 to 700 tons	119	75,034
31 to 50 tons	816	32,616	701 to 800 tons	100	73,242
51 to 100 tons	679	50,305	801 to 900 tons	60	51,929
101 to 200 tons	359	51,679	901 to 1,000 tons	34	33,036
201 to 300 tons	210	53,495	1,001 to 1,400 tons	23	28,259
301 to 400 tons	216	76,626			
401 to 500 tons	317	146,037	Total	7,111	828,819

The number of sailing vessels belonging to the Italian mercantile marine in 1884 was 7,072, with a tonnage of 848,704. There has thus been in 1885 an increase of 39 vessels and a decrease in tonnage of 19,885 tons.

Number and tonnage of the steamers belonging to the Italian mercantile marine in 1885.

Size.	Number of vessels.	Tonnage.	Size.	Number of vessels.	Tonnage.
1 to 50 tons	61	1,179	701 to 800 tons	10	7,506
51 to 100 tons	16	1,208	801 to 900 tons	11	9,555
101 to 200 tons	18	2,345	901 to 1,000 tons	2	1,865
201 to 300 tons	20	4,862	1,001 to 1,500 tons	28	34,237
301 to 400 tons	14	4,879	Over 1,500	21	43,508
401 to 500 tons	7	3,058			
501 to 600 tons	8	4,536	Total	225	124,600
601 to 700 tons	9	5,842			

The number of steamers belonging to the Italian mercantile marine in 1884 was 215, with a tonnage of 122,297. There has therefore been an increase of 10 steamers and an increase of 2,303 tons in 1885.

Number and tonnage of Italian sailing vessels in 1885, *compared with the four preceding biennial periods.*

Size.	1885.		1883.		1881.		1879.		1877.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
1 to 10 tons	2,323	14,465	2,302	13,748	2,434	14,068	2,486	12,915	4,282	21,738
11 to 30 tons	1,648	28,274	1,785	29,979	1,913	32,159	1,980	32,163	2,640	44,867
31 to 50 tons	816	32,610	792	31,512	789	31,415	1,553	81,407	1,774	93,156
51 to 100 tons	679	50,305	673	49,194	695	50,764				
101 to 200 tons	359	51,679	344	49,794	361	42,528	368	51,324	414	59,994
201 to 300 tons	210	53,495	216	54,870	236	60,034	249	61,985	288	72,189
301 to 400 tons	216	76,626	238	84,268	263	92,978	273	99,751	309	109,092
401 to 500 tons	317	146,037	348	159,919	366	167,947	372	169,109	389	177,313
501 to 600 tons	205	114,121	224	124,400	233	129,339	251	137,229	269	147,291
601 to 700 tons	119	75,034	125	78,956	135	85,293	152	97,810	160	102,906
701 to 800 tons	100	93,243	98	71,778	101	74,170	108	81,238	103	77,288
801 to 900 tons	60	51,629	66	56,749	60	52,339	65	55,327	68	57,841
901 to 1,000 tons	34	33,036	35	33,980	35	34,111	33	31,253	27	25,658
Over 1,000 tons	25	28,259	24	26,725	16	18,199	20	21,796	19	21,297
Total	7,111	828,819	7,270	865,881	7,639	895,359	7,910	933,806	10,742	1,010,130

Number and tonnage of the Italian steamers in 1885, compared with the four preceding biennial periods.

Size.	1885.		1883.		1881.		1879.		1877.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
1 to 50 tons	61	1,779	53	1,071	42	904	34	698	34	[illegible]
51 to 100 tons	16	1,208	18	1,292	15	1,052	16	1,125	23	[illegible]
101 to 200 tons	18	2,345	15	1,998	13	1,754	13	1,698	14	[illegible]
201 to 300 tons	20	4,862	16	3,975	8	1,982	9	2,245	8	[illegible]
301 to 400 tons	14	4,899	14	4,895	18	4,316	13	4,516	18	[illegible]
401 to 500 tons	7	3,058	5	2,134	13	4,711	12	5,362	8	[illegible]
501 to 600 tons	8	4,536	7	3,993	5	2,813	4	2,219	7	[illegible]
601 to 700 tons	9	5,812	9	5,842	6	3,790	4	2,538	7	[illegible]
701 to 800 tons	10	7,506	10	7,506	9	6,767	5	3,679	2	[illegible]
801 to 900 tons	11	9,555	11	9,553	8	6,818	6	5,092	8	[illegible]
901 to 1,000 tons	2	1,865	3	2,858	7	6,626	7	6,607	7	[illegible]
1,001 to 1,500 tons	28	34,237	23	27,217	29	34,568	28	36,891	16	[illegible]
Over 1,500 tons	21	43,508	17	35,118	8	16,376				
Total	225	124,600	201	106,452	176	93,698	151	72,066	151	[illegible]

Number of men employed in the Italian mercantile marine in 1885.

Occupation.	Number.	Occupation.	Number.
Masters	10,593	Naval engineers and constructors	[illegible]
Mates	638	Carpets, &c	[illegible]
Pursers and clerks	76	Workmen in iron-ship building	[illegible]
Engineers	448	Pilots	[illegible]
Able seamen	7,726	Coast fishermen	[illegible]
Ordinary seamen and boys	93,420	Boatmen	[illegible]
Firemen	1,548		
Deep-sea fishermen	5,243	Total	[illegible]

In 1884 the total number of men and boys was 189,162. There have been added to this force, in 1885, 2,884 persons, more than half being boys.

There were 687 desertions from the Italian mercantile marine in 1885, or 142 fewer than in 1884. Of these 687 desertions 107 took place in American waters.

It is evident from the foregoing statements that the Italian mercantile marine was in very nearly the same condition in 1885 that it was in 1884. The downward movement was, it is true, arrested, but there was no increase of tonnage worth mentioning.

SHIPPING BOUNTIES.

In December, 1885, the Italian Parliament passed a law for the encouragement of Italian ship-building and commerce, the chief provisions of which are as follows:

Bounties given to Italian ship-builders.

For sailing vessels of wood	[illegible]
For sailing vessels of iron or steel	[illegible]
For steamers of iron or steel	[illegible]
For launches and small craft of iron or steel	[illegible]
For marine engines (per horse-power)	[illegible]
For marine boilers and the repair of boilers built in Italy (for every 220.464 pounds)	[illegible]

In addition, the law gives to all vessels built in Italy or built abroad if placed under the Italian flag within one year from the passage of the law, 65 cents per ton for every 1,000 miles of distance sailed, subject, however, to the following conditions: Sailing vessels, in order to receive this bounty, must not be more than fifteen years old, and steamers must not be more than ten years old. No vessels sailing in ballast can receive this bounty, and it will be paid only to vessels sailing from continent to continent. The law is to remain in force for a period of ten years.

Of course the law was passed too late to have any effect upon the mercantile marine in 1885. From the date of the passage of the law, December 6, 1885, to the 30th of June, 1886, 22 steamers and 332 sailing vessels had taken advantage of the premium offered for every 1,000 miles sailed in international navigation. Of these steamers 19, aggregating 32,700 tons, belong to the General Italian Navigation Company. This company now owns a fleet of 109 steamers of 57,633 tons, and when it is remembered that the entire Italian steam fleet consists of 225 vessels of 124,600 tons, and that there is only one other company (La Veloce, of Genoa, owning 4 steamers of 6,337 tons) of any consequence, which is engaged in international commerce, it is evident that the General Italian Navigation Company will be the chief recipient of the Government's bounty. At the time of the passage of the law this company had lines of steamers running from Italy to North America, the Atlantic coast of South America, and to India, as well as to all points on the Mediterranean. It has since then established lines to Valparaiso, and also to Singapore, Batavia, and Hong-Kong.

There were also made, up to June 30, 1886, 86 claims for the construction of wooden sailing vessels, 12 for the construction of small iron or steel steamers (all of which were tow-boats), and 1 for the construction of an iron launch. There were 15 claims for the construction of engines and boilers, 13 for the construction of boilers only, and 1 for the construction of an engine. For the repairing of vessels 150 claims were made, and 35 were made for repairs to boilers.

EXPORTS AND IMPORTS.

Commerce of Italy with other nations in 1885 *compared with* 1884.

Articles.	Imports.		Exports.	
	1885.	1884.	1885.	1884.
Spirits, wines and oils	$16, 847, 654	$10, 904, 996	$21, 905, 186	$31, 767, 852
Groceries, spices and tobacco	24 828, 894	17, 478, 845	1, 185, 851	1, 082, 229
Chemicals, drugs, resins, and perfumery	6, 953, 190	7, 942, 273	6, 970, 828	7, 880, 321
Dyes, dye-stuffs, and articles for tanning purposes	4. 818, 356	4, 738, 660	2, 360, 163	2, 062, 078
Hemp, flax, jute, &c	7, 055, 512	6, 972, 610	8, 068, 240	8, 401, 064
Cotton	34, 063, 342	34, 131, 976	4, 864, 550	5, 788, 513
Wool and hair	19, 938, 020	20, 283, 004	1, 128, 418	1, 787, 788
Silk	17, 647. 051	19, 406, 791	53, 455, 171	57, 989, 064
Wood and straw	11, 307, 377	10. 817, 872	12, 004, 921	11, 557, 845
Books and paper	2, 993, 007	2, 542, 782	1, 515, 492	1, 810, 504
Skins, hides, and furs	12, 926, 143	11, 646, 514	8, 951, 087	4, 328, 619
Minerals and metals	54, 460, 850	35, 624, 329	41, 495, 000	9, 862, 031
Stone, earths, pottery, and glass	20, 122, 043	19, 197, 550	11, 486, 036	12, 293, 655
Cereals, flour, and vegetable products not elsewhere included	39, 119, 226	27, 210, 458	21, 473, 990	23, 638, 118
Animals and animal products not elsewhere included	22, 380, 567	21, 609, 861	24, 378, 901	28, 436, 959
Miscellaneous	9, 531, 809	9, 442, 040	2, 516, 083	2, 352, 812
Total	304, 038, 056	259, 345, 561	218, 659, 920	211, 008, 958

As will be seen from the foregoing statement the imports of 1885 exceeded those of 1884 by $44,692,495, and the exports of 1885 exceeded those of 1884 by $7,050,962. The following statement shows the categories of the Italian tariff in which these differences occurred:

Differences of imports and exports in 1885 *and* 1884.

Articles.	Imports.		Exports.	
	Increase in 1885.	Decrease in 1885.	Increase in 1885.	Decrease in 1885.
Spirits, wines, and oils	$5, 442, 658			[illegible]
Groceries, spices, and tobacco	6, 855, 049		$103, 622	
Chemicals, drugs, resins, and perfumery		$989, 083		909, [illegible]
Dyes, dye-stuffs, and articles for tanning purposes	74, 696			301, [illegible]
Hemp, flax, jute, &c	82, 902			332, [illegible]
Cotton		68, 634		[illegible]
Wool and hair		294, 978		[illegible]
Silk		1, 759, 740		4, [illegible]
Wood and straw	489, 505		447, 576	
Books and paper	450, 225			295, [illegible]
Skins, hides, and furs	1, 279, 629			[illegible]
Minerals and metals	18, 836, 530		31, 632, 969	
Stone, earths, pottery, and glass	924, 493			1, 807, [illegible]
Cereals, flour, and vegetable products not elsewhere included	11, 908, 768			2, 184, [illegible]
Animals and animal products not elsewhere included	1, 370, 706			4, 658, [illegible]
Miscellaneous	69, 769		163, 271	
Total	47, 804, 930	3, 112, 435	33, 347, 438	25, [illegible]

Commerce of Italy with other nations in 1885 *compared with* 1884.

Countries.	Imports.		Exports.	
	1885.	1884.	1885.	1884.
Austria	$45, 568, 651	$39, 772, 861	$19, 645, 377	$21, 483, [illegible]
Belgium	6, 584, 907	5, 868, 744	3, 950, 131	3, 928, [illegible]
France	70, 984, 435	55, 843, 778	99, 135, 801	82, [illegible], 149
Germany	23, 241, 060	21, 370, 890	21, 174, 650	21, 085, [illegible]
Great Britain	60, 618, 212	57, 947, 285	14, 235, 487	17, 396, [illegible]
Greece and Malta	4, 313, 936	1, 214, 935	3, 218, 082	2, [illegible]
Holland	2, 349, 389	1, 639, 585	1, 386, 705	1, 694, [illegible]
Russia	17, 661, 430	9, 809, 418	3, 501, 590	4, 397, [illegible]
Spain, Gibraltar, and Portugal	2, 744, 653	1, 437, 657	2, 796, 956	2, 459, [illegible]
Sweden, Norway, and Denmark	827, 005	852, 288	344, 505	484, [illegible]
Switzerland	14, 855, 210	14, 521, 513	24, 099, 717	24, 925, [illegible]
European Turkey	9, 281, 370	5, 016, 640	2, 788, 446	2, 558, [illegible]
Asiatic Turkey	3, 870, 808	1, 638, 377	319, 415	525, [illegible]
British India	14, 770, 483	19, 255, 996	3, 150, 339	4, 611, [illegible]
China and Japan	94, 763	981, 019	36, 070	28, [illegible]
Egypt	4, 088, 319	3, 346, 813	2, 532, 932	3, [illegible], 170
Tunis and Tripoli	3, 873, 317	1, 924, 596	2, 113, 543	1, 420, [illegible]
Algiers	1, 072, 694	333, 504	276, 560	340, [illegible]
Other African countries	185, 280	12, 545	399, 703	161, 541
United States and Canada	13, 985, 938	11, 622, 846	8, 228, 169	10, [illegible]
The states of the Plata	3, 089, 544	3, 380, 009	4, 628, 333	4, [illegible]
Peru and Chili	11, 580	186, 052	350, 488	554, [illegible]
Other American countries	1, 491, 890	1, 363, 738	912, 890	1, [illegible], 174
Australia	10, 615	5, 211	51, 145	27, 985

The increase of imports from Austria, France, Greece, Malta, Russia, and European Turkey was especially large, and there was a relatively large decrease in the imports from British India and from China and Japan. The exports to France were somewhat increased in 1885, and the most notable decrease was in the exports to Great Britain.

Total imports from and exports to the United States and Canada for the five years ending December 31, 1884.

IMPORTS.

Articles.	1881.	1882.	1883.	1884.	1885.
Spirits, wines, and oils	$4, 235, 808	$3, 417, 065	$4, 044, 701	$3, 826, 611	$3, 907, 478
Groceries, spices, and tobacco	1, 848, 747	4, 261, 440	1, 771, 354	2, 229, 729	3, 668, 930
Chemicals, drugs, resins, and perfumery	1, 012, 770	598, 686	1, 113, 417	1, 573, 722	1, 022, 128
Dyes and dye-stuffs, and articles for tanning purposes	9, 457	33, 582	115, 221	93, 026	83, 376
Hemp, flax, jute, &c	....	8, 878	1, 544	4, 246	9, 843
Cotton	2, 891, 333	3, 118, 687	2, 250, 760	1, 980, 373	3, 118, 880
Wool and hair	230, 219	740, 541	537, 312	363, 805	352, 032
Silk	....	....	....	....	....
Wood and straw	201, 878	121, 783	94, 570	128, 731	290, 079
Books and paper	965	2, 702	1, 544	6, 549	11, 966
Skins, hides, and furs	464, 744	96, 690	652, 840	540, 593	446, 023
Minerals and metals	24, 704	54, 426	207, 668	94, 184	132, 012
Stone, earth, pottery, and glass	67, 936	60, 023	35, 126	199, 176	54, 426
Cereals, flour, and vegetable products not elsewhere included	783, 001	485, 781	88, 762	808, 203	520, 714
Animals and animal products not elsewhere included	434, 443	311, 888	382, 486	239, 899	334, 276
Miscellaneous	....	3, 088	8, 492	20, 262	83, 775
Total	12, 236, 042	13, 815, 260	11, 300, 303	11, 604, 109	13, 985, 938

EXPORTS.

Spirits, wines, and oils	$294, 904	$1, 120, 751	$928, 488	$684, 764	$546, 962
Groceries, spices, and tobacco	359, 173	288, 535	870, 946	305, 133	88, 587
Chemicals, drugs, resins, and perfumery	608, 915	1, 069, 220	1, 064, 588	939, 331	1, 389, 793
Dyes and dye-stuffs, and articles for tanning purposes	845, 856	870, 946	506, 625	419, 003	387, 930
Hemp, flax, jute, &c	161, 120	36, 935	121, 011	74, 305	85, 885
Cotton	83, 968	7, 834	31, 073	40, 723	158, 452
Wool and hair	194, 386	260, 478	26, 441	61, 958	45, 355
Silk	120, 239	63, 234	18, 528	20, 261	76, 235
Wood and straw	984, 686	957, 280	246, 654	93, 044	341, 057
Books and paper	198, 211	208, 463	222, 336	186, 351	77, 586
Skins, hides, and furs	43, 425	17, 177	55, 584	97, 070	1, 544
Minerals and metals	208, 034	139, 732	226, 968	12, 545	283, 131
Stone, earth, pottery, and glass	3, 699, 231	3, 533, 068	3, 318, 635	2, 904, 843	2, 324, 492
Cereals, flour, and vegetable products not elsewhere included	3, 657, 939	3, 553, 323	4, 088, 686	4, 582, 399	2, 850, 417
Animals and animal products not elsewhere included	42, 267	107, 115	179, 297	195, 316	160, 962
Miscellaneous	48, 638	48, 636	33, 389	58, 093	88, 780
Total	10, 670, 000	11, 864, 482	11, 389, 249	10, 630, 147	8, 807, 168

Imports into Italy from the United States and Canada in 1885.

Articles.	Quantity.	Value.	Articles.	Quantity.	Value.
Spirits:					
Pure ....galls..	340, 924	$124, 485	Oxide of iron, lead, and zinc ....lbs..	21, 163	$579
Refined.........do...	3, 962	5, 246	Borate of soda ......do...	3, 968	193
In bottles ....No..	1, 600	772	Cinchona bark......do...	5, 292	965
Olive oil.............lbs..	70, 326	6, 948	Miscellaneous medicines, prepared ....lbs..	5, 292	2, 316
Cotton-seed oil......do...	4, 698, 002	349, 523	Resins..............do...	7, 746, 303	1, 017, 110
Heavy oils..........do...	206, 350	2, 702	Dyes and dye-stuffs (not prepared..........lbs..	2, 437, 404	64, 848
Fixed oils...........do...	439, 596	32, 617	Other dyes and dye-stuffs, pounds............ ...	36, 818	19, 528
Petroleum and mineral oils refined........lbs..	193, 391, 962	3, 386, 185	Cordage ....lbs..	70, 106	7, 913
Coffee ....do...	8, 232, 601	424, 407	Made up articles, of linen.................lbs..	7, 152	1, 930
Sugar................do...	12, 339, 962	432, 127	Cotton, raw ....do...	30, 895, 484	3, 234, 088
Cocoa, unprepared .do...	41, 666	8, 106	Cotton tissues:		
Cinnamon ....do...	5, 070	965	Unbleached ....do...	5, 732	1, 930
Cloves ....do...	1, 543	193	Bleached ....do...	2, 865	965
Pepper and pimento.do ..	93, 084	12, 159			
Tobacco, raw ....do...	22, 952, 972	2, 786, 900			
Cigars ....do...	101, 849	4, 053			
Soda, caustic (crude) do...	47, 178	965			

Imports into Italy from the United States and Canada in 1885—**Continued.**

Articles.	Quantity.	Value.
Cotton tissues—Cont'd.		
Colored or dyed . lbs..	3, 306	$1, 737
Oil-cloth ....do...	6, 393	2, 316
Wool:		
Raw............do...	1, 756, 842	330, 609
Washed ....do...	19, 620	6, 369
Hair (not human) raw and dyed..........lbs..	55, 114	13, 510
Made up woolen articles, pounds..................	....	1, 544
Wood:		
For cabinet-makers, pounds	1, 397, 274	42, 846
Common, cub. meters .	25, 399	220, 599
Barrels, new and old, gallons of capacity	118, 052	965
Furniture ....lbs..	12, 124	3, 860
Wooden utensils....do...	15, 428	1, 158
Matting, straw, common, pounds.................	220, 460	11, 580
Straw hats ....No..	1, 200	386
White paper ....lbs..	7, 494	772
Wall-paper ....do...	28, 218	4, 632
Books:		
Unbound ....do...	7, 152	3, 088
Bound in leather and parchment ....lbs..	5, 732	3, 474
Patent leather......do...	9, 038	11, 966
Scrap leather ....do...	21, 163	386
Hides:		
Bovine..........do...	1, 672, 850	388, 123
Small, ovine and caprine...........lbs..	149, 028	35, 898
Other small......do..	24, 030	4, 246
Tanned and unhaired.........lbs..	12, 124	5, 404
Cast iron:		
Not manufactured, pounds	79, 803	4, 825
Manufactured...lbs..	4, 629	965
Iron hammered and wrought ....lbs..	21, 824	193
Iron and steel rails..do...	127, 421	16, 405
Tin, manufactured..do...	4, 188	386
Miscellaneous tools and utensils of iron and steel ....lbs..	51, 365	3, 860
Copper, brass, and bronze articles ....lbs..	1, 543	386
Tin ....lbs..	4, 409	$772
Zinc in sheets .....do...	220, 460	11, 387
Machinery, fixed, steam, pounds................	21, 383	1, 930
Machinery, and parts of, miscellaneous....lbs..	632, 275	66, 392
Clocks ....No..	1, 002	6, 755
Clock cases ....lbs..	4, 188	9, 071
Clock works ....do...	2, 984	865
Marble, wrought ..do...	3, 086	193
Coal ....tons..	11, 733	54, 233
Grain..............do...	3, 462	130, 275
Indian corn........do...	6, 776	189, 719
Other cereals ......do...	4, 490	147, 259
Rice ....do...	75	4, 053
Flour ....lbs..	420, 858	11, 001
Bran...............do...	132, 276	1, 351
Fecula..............do...	88, 184	2, 702
Starch ....do...	24, 911	1, 351
Oleaginous seeds ..do...	525, 576	14, 668
Other seeds........do...	331, 571	13, 124
Oil of palm and cocao, pounds................	65, 074	5, 211
Meat:		
Salted and smoked, pounds............	7, 273	1, 351
Cooked ....do...	4, 409	772
Gut, salted ....do...	31, 305	4, 053
Fish:		
Dried or smoked, pounds......	1, 745, 822	91, 675
In oil ....lbs..	7, 152	386
In brine ....do...	7, 936	579
Grease.............do...	2, 604, 954	193, 772
Stearic acid........do...	8, 818	1, 158
Candles, stearine ..do...	3, 306	579
Beeswax, crude....do...	15, 853	3, 860
Coral, wrought but not mounted ....lbs..	934	16, 405
Horns, bones, and the like...... .....tons..	083	19, 686
Haberdashery:		
Common ....lbs..	9, 920	6, 562
Fine ....do...	6, 612	14, 475
Instruments, optical, surgical, and chemical ....lbs..	8, 596	11, 194
Harmoniums.......No..	8	193

Exports from Italy to the United States and Canada in 1885.

Articles.	Quantity.	Value.
Wine in wood .....galls..	418, 154	$58, 093
Wine in bottles .....No..	79, 800	30, 880
Spirits in bottle.....do...	39, 300	18, 142
Olive oil............. lbs..	2, 806, 674	319, 415
Fixed oils, miscellaneous, pounds.................	330, 247	24, 511
Volatile oils, essences of orange and the like, pounds.................	30, 930	37, 828
Candied fruit and preserves.............lbs..	108, 149	16, 019
Mustard seed ....do...	1, 059, 069	37, 056
Medicinals, not otherwise named.............lbs..	162, 036	35, 512
Boracic acid ....do...	886, 486	18, 335
Salts of quinine .....do...	3, 122	46, 320
Borax...............do..	7, 273	579
Marine salt ....tons..	61, 164	129, 889
Sulphate of barites ..lbs..	27, 338	193
Tartar .. ..do...	7, 952, 709	877, 590
Wax matches.......do...	83, 329	14, 668
Miscellaneous chemical products .... lbs..	549, 164	38, 407
Licorice root ....do...	90, 168	2, 316
Miscellaneous medicinal herbs, leaves, flowers, and bark . ...lbs..	164, 242	$14, 475
Manna...............do ..	39, 902	17, 563
Orange and lemon peel, pounds.	24, 250	386
Lemon and citron juice, crude ....lbs..	81, 346	1, 158
Lemon and citron juice, concentrated ......lbs..	711, 424	55, 970
Miscellaneous vegetable juices ....lbs..	231, 765	50, 180
Miscellaneous medicinals, pounds................	98, 104	3, 474
Miscellaneous medicinals, prepared ....lbs..	14, 326	6, 176
Soap, common.......do...	2, 075, 850	130, 238
Perfumery......... do...	6, 173	2, 509
Wood, leaves, bark, &c., for dyeing and tanning, not ground ....lbs..	80, 442	2, 123
Wood, leaves, bark, &c., for dyeing and tanning, ground..............lbs..	13, 374, 463	385, 867

Of the categories in which the increase of imports in 1885 was most noticeable, it may be said the increase in the category of minerals and metals, in which is included machinery, is due in a large measure to the growth of Italian industries. The same may be said of the increased importation of cotton, and of skins and hides. The increase in the importation of cereals in 1885 was very large, and the large increase in the importation of groceries is an evidence of the increased prosperity of the people.

The increase of imports from the United States in 1885 was $2,363,092, and the decrease in the value of exports to the United States was $2,402,078. The increase in imports from the United States was due chiefly to the increase of $1,312,593 in raw cotton; of $21,423 in machinery; of $113,098 in common wood; of $764,646 in tobacco; of $205,931 in cotton-seed oil, and of $387,718 in raw bovine hides.

The decrease in exports to the United States was to some extent affected by the cholera in Italy, which also seriously affected the Italian import trade. There was a decrease of $126,608 in the value of the exports of statuary (marble and alabaster); of $59,830 in rags; of $1,939,351 in oranges and lemons; and of $111,168 in grease.

IMPORTS AND EXPORTS IN THE FIRST SIX MONTHS OF 1886.

The total value of imports into Italy (excluding gold and silver coins and bullion) in the first six months of 1886 was $132,562,827, and the total value of exports from Italy during the same period (excluding gold and silver coin and bullion) was $111,037,197. This shows a decrease of imports as compared with the same period in 1885 of $12,539,595, and an increase of exports of $26,221,852.

CHOLERA.

The cholera has lingered in Italy, not only during the year 1885, but up to the present time. Its ravages in 1885 were, however, much less severe than in 1884. In the latter year there were 26,557 cases and 14,203 deaths, while in 1885 there were 6,397 cases and 3,459 deaths.

The present epidemic has been much less fatal than its predecessor. The total deaths from cholera in Italy in 1884 and 1885 were 17,758, while in 1865 there were 12,843 deaths; in 1866, 19,629; and in 1867, 127,968.

So far as remedies for cholera are concerned, it is not clear that the remedial treatment to-day is much more efficacious than it was in former days. A great advance, however, has been made in the direction of the preventive measures and in the knowledge of the way in which the disease is conveyed.

That during the present epidemic cholera has been to a very large extent spread by contaminated water has been made very clear. In Genoa in 1884 the aqueduct bringing water from a small river was contaminated because the clothes of cholera patients at a little town a short distance above the place where the aqueduct received its water were washed in the stream. At Naples and Palermo the water supply came chiefly from wells and other sources that were easily contaminated, and at nearly all the other Italian towns where the cholera has been particularly severe the authorities have made the significant report, "Water supply bad."

The cholera existed in a mild form in Venice during the early part of 1885, and appeared as an epidemic in Brindisi and neighboring com-

ARTICLE IV.

Whoever violates the terms of this law will be punished by a fine of from 50 lire [$9.65] to 100 lire [$19.30] for each child admitted to work. If the offense is not the first one, the fine may be increased to double the aforesaid sum. In cases in which the offender who has taken the child to work is unknown, the fine will be inflicted upon the director or jobber who has charge of the manufactory, quarry, or mine.

ARTICLE V.

The execution of the law is assigned to the ministry of agriculture and commerces which will act in concert with the ministry of the interior. Engineers of mines and superintendents of manufactories will exercise surveillance over manufactories, quarries, and mines, and will report violations of the law. Documents relating to violations of the law shall be transmitted to the prefect of the province, who, whenever needful, may consult the provincial sanitary council, and shall present the case to the judicial authorities.

ARTICLE VI.

The regulations to be prepared for the execution of this law, on the advice of the superior councils of health and commerce, will contain details applicable to localities.

The present law will take effect six months after its publication in the Official Gazette. We order that the present, under the seal of the State, be inserted in the official collection of laws and decrees of the Kingdom of Italy, commanding whomsoever it may concern to observe it and make it observed as a law of the state.

Given at Rome the 11th day of February, 1886.

TREATIES.

The only treaty concluded between Italy and any other country between June 30, 1885, and June 30, 1886, was a treaty with Uruguay, which was signed on the 19th day of September, 1885. The main provisions of this treaty are as follows:

There shall be complete and entire freedom of commerce and navigation between Italy and Uruguay.

The citizens of one country shall enjoy in the other the same rights, privileges, immunities, and exemptions for their commerce and navigation which are or shall be enjoyed by the citizens of the other, without paying any greater tax or impost than is paid by the latter. Ships of one country shall be treated in the ports of the other as those of the most favored nation.

Citizens of one country shall enjoy in the other the same rights to reside, travel, or carry on business which are enjoyed by the citizens of the other country, and shall enjoy exemption from military service of all kinds, and their property shall be exempt from sequestration for public use.

Each of the contracting parties agrees not to accord in its own dominions monopolies or privileges prejudicial to the commerce of the other.

The coasting trade of each country is open to the vessels of the other country on the same terms as if they were vessels belonging to the citizens of the country where such coasting trade is carried on.

In case of war between Italy and Uruguay, private property will be respected whether on land or at sea or under whatever flag, except in case of the breaking of a blockade, or when it is contraband of war.

Citizens of one country will enjoy in the other the same civil rights, including the rights of protecting inventions and trade-marks, which the citizens of the other country enjoy.

If one of the contracting parties should hereafter accord to any other nation any favor or concession, it will be *ipso facto* extended to the other of the contracting parties, excepting such favors as Uruguay may extend to nations whose territory borders on her own.

PUBLIC DEBT.

On the 30th of June, 1886, the public debt of the Kingdom of Italy, including the floating debt, amounted to $2,202,886,026, with an annual interest amounting to $103,120,752. This debt was composed as follows:

Consolidated debt inscribed in the Great Book	$1,737,000,000
Permanent rents in the name of the Holy See	12,448,500
Debts separately inscribed in the Great Book	102,676,000
Various debts (*contabilita*, diverse)	307,915,430
Floating debt	42,846,096
Total	2,202,886,026

During the year the Italian 5 per cent. bonds rose above par, and continue at the date of the present writing to remain at 101 and a fraction. Those patriotic and intelligent persons who, having faith in the future of Italy, bought those bonds ten or fifteen years ago have reaped a rich and deserved harvest.

WILLIAM L. ALDEN,
Consul-General.

CONSULATE-GENERAL OF THE UNITED STATES,
Rome, November 12, 1886.

NETHERLANDS.

Report of Consul Eckstein on the trade and commerce and other material interests of Amsterdam and in the Netherlands in 1885.

TRADE DEPRESSION.

In a report on same subjects, I made last year (dated September 3, and published in Consular Reports, January, 1886, No. 60) I had occasion to make the following remarks, viz:

> Within this consular district and in the Netherlands generally, the year 1884 has been replete with disappointments to nearly all interested in commerce, navigation, and industry.
>
> While commerce and trade were subject to unfavorable conditions, it was natural that navigation and industry should be gravely affected, and suffer more or less at the same time.
>
> Freights were very low throughout the whole year, and cargoes often scarce.
>
> Many industrial establishments found themselves short of work, and were compelled to discharge large numbers of workmen.
>
> Neither have agricultural affairs been flourishing. Land-owners, farmers, and dairymen have good cause to be dissatisfied and to complain, the former because land depreciated in value and rents have come down, while taxes have not been lowered, and the latter on account of lower prices for many articles, the product of the farm and dairy.
>
> Thus heavy losses were sustained from transactions in many articles of commerce; poor results were attained from navigation; most industries were in a state of extreme languishment, and in addition thereto there has been a considerable shrinkage in the values of securities of many descriptions.
>
> Such are some of the features which characterize the outcome of the year 1884, in so far this consular district and country is concerned.

The above remarks are reproduced because they, unfortunately, not only apply, in almost every particular, with equal force to the year 1885, but as to the actual condition of affairs, commercial, industrial, agricultural, &c., during that year; and up to the present they apply to them, in some respects, with increased force.

In fact it may be said that the results of the long-continued and general depression of the trade, &c., as prevailing in many countries of Europe and in other parts of the world, have made themselves felt in a number of vessels laden with lumber, grain, and rice, intended for places on the river Zaan, landed, instead of at Amsterdam, as they formerly did, as a rule.

Up to the time of the opening of the North Sea Canal the navigation of this port was limited to sailing vessels bringing products from the Dutch East and West Indies, mostly Government imports; further, to the arrivals of grain-carrying vessels from the Baltic, a few vessels that brought lumber, and a few bottoms from the United States with American products.

All this has become very much changed since Amsterdam has been connected with the sea by a canal of ample capacity; and being joined to the European railway system, its former isolated position has ceased to exist.

At the same time present aspects do not indicate that Amsterdam as a port, will make any very great headway in the near future unless city and country will co-operate in efforts to further and greatly improve its harbor works and other important facilities and make them more equal and in some respects superior, if possible, to those of the neighboring ports of Hamburg, Bremen, and Antwerp.

A great deal has been accomplished in this direction during the past ten years, but to retain the results and benefits thereof, and for their increase, a great deal more still remains to be done.

Progress in this direction on any really extensive scale can, however, hardly be expected whilst the ocean traffic with the East India colonies remains as poor and unprofitable as it has been during the last two years or more.

Out-freights were generally very scarce, and the freight rates to and from the colonies unprecedentedly low.

Of sixteen steamers in the India trade and belonging to two companies established at Amsterdam, one company has temporarily withdrawn five, and still there is but little business, and that unpaying, for the ships kept running.

About the marine works at Ymuiden, the out-port of Amsterdam, the piers and breakwaters, the harbor and lock, it can be said that their good condition is well maintained and that they continue excellently to answer the purposes for which they were constructed. There is only this to be remarked, that the lock there is now found to be hardly long enough to admit and serve a certain class of vessels. This defect—a rather serious one—the Government contemplates remedying in the near future, as I am informed.

As to the capacity or depth of the canal I would observe that last year several ships drawing fully 23 feet of water passed through it and came up to Amsterdam without the least inconvenience or difficulty.

A comparative statement of the merchant fleet under the Dutch flag in the past twenty-five years exhibits a great decline of the same, as is shown by the following, viz:

January 1—	Sailing vessels.	Steamers.	Total tonnage.
	No.	*No.*	
1860	1,985	38	[illegible]
1870	1,534	47	344,[illegible]
1875	1,218	80	353,[illegible]
1880	927	79	354,[illegible]
1885	630	106	348,[illegible]

Of these ships and vessels and during the same period of time the number which answered to the requisite conditions and were found to be fit to be permitted to transport Government products is shown by the following statement, viz:

January 1—	Sailing vessels.	Steamers.	Total tonnage.
	No.	*No.*	
1860	536	....	280,000
1870	350	....	215,000
1875	193	10	178,000
1880	117	13	130,100
1885	82	31	135,000

Number of ships and vessels arrived at and departed from Amsterdam, from and for United States ports, specifying their cargoes, during the years 1884 *and* 1885.

ARRIVALS.

Cargoes.	1884.	1885.	Cargoes.	1884.	1885.
General cargo	23	23	Maize	1	2
Petroleum	39	30	Ballast	1	......
Cotton	14	4			
Lumber	19	8	Total	97	67

DEPARTURES.

Cargoes.	1884.	1885.	Cargoes.	1884.	1885.
General cargo	23	24	Empty barrels, cement, and old iron	......	1
Empty barrels	17	9	Empty barrels, rags, and iron wire	1	......
Empty barrels and seed	1	......	Coals	4	1
Empty barrels and old iron	3	13	Old iron	1	......
Empty barrels and iron wire	10	12	Ballast	25	10
Empty barrels and rags	1	......			
Empty barrels and cement	......	3	Total	86	73

Passenger traffic between Amsterdam and Java by the steamers of the Steam Navigation Company Netherland, which made thirty-five round trips in 1885.

Classification.	From Amsterdam to Java.		From Java to Amsterdam.	
	Total.	Average per voyage.	Total.	Average per voyage.
First-class passengers:				
Adults	874	25	758	22
Children under ten years	203	6	278	8
Second-class passengers:				
Adults	280	8	396	11
Children under ten years	18	1	82	2
Servants of passengers	85	2	83	2
Total first and second class passengers	1,460	42	1,597	45
Total third-class passengers	2,340*	66	3,151†	90
Grand total	3,800	108	4,748	135

* This includes 1,024 deck passengers from Djeddah—pilgrims.
† This includes 2,198 deck passengers to Djeddah—pilgrims.

There has not been any very material change in the passenger traffic to or from Java for several years last past, in so far as through passengers are concerned.

It may also be interesting, if not useful, to be stated that the average time consumed in the outward voyage was, in 1885, forty-three days and eight hours, and the shortest time in which any outward voyage was made was thirty-eight days and twenty-two hours. The average time required to make the home voyage was forty-three days and twenty-two hours, and the quickest home voyage was made in thirty-eight days and thirteen hours.

Passage rates from Amsterdam, Marseilles, and Port Said to Batavia and Padang, and vice versa, in 1886.

FIRST-CLASS PASSAGE.

For—	Amsterdam.	Marseilles.	Port Said.
	Florins.	*Florins.*	*Florins.*
Adults or children above ten years of age	800	700	600
Children above two and under ten years of age	400	350	300
Two children under two years of age, together occupying one berth	400	350	300

One child under two years of age taken free, but no berth will be allotted. Any passenger or passengers desiring the exclusive use of a cabin will be charged, if he or they can be accommodated, at the rate of 250 florins for each unoccupied berth in such cabin, in addition to the regular fare as above. Married couples, with or without children, cannot be allowed to occupy part of a cabin excepting under the conditions last above named.

No modifications of the foregoing rates can be entertained, except in the case of families of seven or more persons, principally adults.

The port of embarkation must be distinctly stated at the time the passage is engaged.

A reduction of 10 per cent. on outward and homeward passage moneys will be made to passengers returning to Java, who have arrived from Java by one of the company's steamers, provided their embarkation takes place within twelve months from the date of their arrival, and the reduction is claimed when the return passage is engaged, and that they have had no reduction whatever on the outward voyage.

SECOND-CLASS PASSAGE.

For—	To Batavia from—			From Batavia to—		
	Amsterdam.	Marseilles.	Port Said.	Amsterdam.	Marseilles.	Port Said.
	Florins.	*Florins.*	*Florins.*	*Florins.*	*Florins.*	*Florins.*
Adults or children above ten years of age	400	350	300	450	390	330
Children above two and under ten years of age	200	175	150	225	195	165
Two children under two years of age, together occupying one berth.	200	175	150	225	195	165

One child under two years of age taken free, but no berth will be allotted.

The cabins are fitted to accommodate three, four, and six persons respectively. Women and children are berthed in a separate cabin, unless an opportunity offers of berthing a family together.

RATES OF FREIGHT TO AND FROM JAVA.

The present rates of freight, as established by the Company Netherland for outward cargo on their steamers, are classified into six classes, according to many different articles of merchandise, and, at the com-

Average registered measurement of sailing vessels and steamships in the mercantile marine of the Netherlands each year from 1877 *to* 1884, *inclusive.*

Years.	Sailing vessels.	Steamers.	All sea-going vessels.	Years.	Sailing vessels.	Steamers.	All sea-going vessels.
	Cu. meters.	*Cu. meters.*	*Cu. meters.*		*Cu. meters.*	*Cu. meters.*	*Cu. meters.*
1877	754	2,064	820	1881	822	2,620	981
1878	771	2,131	861	1882	820	2,806	1,024
1879	783	2,184	878	1883	838	3,000	1,098
1880	814	2,367	933	1884	833	2,911	1,118

Number of vessels (sail and steam) and their tonnage or measurement which have been brought under the flag of the Netherlands each year from 1874 *to* 1884, *inclusive.*

Years.	Sailing vessels.						Steamers.					
	Home-built.		Foreign-built.		Total.		Home-built.		Foreign-built.		Total.	
	No.	*Cu. meters.*	*No.*	*Cu. meters.*	*No.*	*Cu. meters.*	*No*	*Cu. meters.*	*No.*	*Cu. meters.*	*No.*	*Cu. meters.*
1874	54	24,000	18	17,000	72	41,000	1	1,000	9	31,000	10	32,000
1875	27	29,000	24	28,000	51	57,000	1	1,000	6	22,000	7	23,000
1876	38	38,000	22	20,000	60	58,000	....	....	3	12,000	3	12,000
1877	21	17,000	20	14,000	41	31,000	1	2,000	4	13,000	5	15,000
1878	21	16,000	25	33,000	46	49,000	....	....	4	14,000	4	14,000
1879	24	20,000	11	15,000	35	35,000	1	1,000	5	15,000	6	16,000
1880	13	5,000	15	14,000	38	19,000	3	2,000	7	20,000	10	22,000
1881	6	4,000	11	11,000	17	15,000	2	1,000	8	37,000	10	48,000
1882	16	8,000	28	20,000	39	23,000	3	9,000	8	35,000	11	44,000
1883	20	12,000	13	13,000	33	25,000	7	26,000	8	27,000	15	53,000
1884	22	11,000	11	8,000	33	19,000	11	23,000	2	7,000	13	30,000

Number and nationality of seamen engaged in home and foreign ports for service on board of Dutch sail and steam vessels in the mercantile fleet from 1875 *to* 1884 *each year.*

Years.	Netherlanders.		Foreigners.		Total.	Years.	Netherlanders.		Foreigners.		Total.
	No.	*Pr. ct.*	*No.*	*Pr. ct.*	*No.*		*No.*	*Pr. ct.*	*No.*	*Pr. ct.*	*No.*
1875	12,679	83.7	2,470	16.3	15,149	1880	11,492	76.1	3,602	23.9	15,094
1876	12,573	81.1	2,933	18.9	15,506	1881	11,480	76.5	3,528	23.5	15,008
1877	11,288	78.2	3,156	21.8	14,444	1882	12,615	77.7	3,613	22.3	16,228
1878	11,613	80.7	2,793	19.3	14,406	1883	12,044	79.9	3,174	20.1	15,218
1879	10,499	77.2	3,105	22.8	13,604	1884	12,223	81.1	2,856	18.9	15,079

From the foregoing it will be observed that the ship-building of this country is not in a very flourishing condition; that but few sea-going vessels for the foreign trade are being constructed in its ship-yards, and none at all of really large dimensions.

As Holland does not produce either iron or coal, and hardly any timber, it cannot be said to possess facilities of the highest order for ship-building purposes, whilst in many other respects the country seems extremely favorably situated and in every way amply prepared to build ships of any class, size, and material for the ocean traffic as well as for coast and inland navigation.

All sorts of crafts, such as are employed in the herring and other fisheries and in carrying on traffic and being variously employed on the Zuider Zee, on the rivers and canals, and in the harbors, are, so far as I can learn, exclusively of domestic construction.

Considering that the interior navigation and commerce of this country are of great importance, and its fisheries also extensive, the amount of tonnage turned out yearly for employment therein must be very

The American Manufacturing Company, Waynesborough, Pa., has recently furnished an evaporator for one of the largest fruit-preserving establishment here.

The Troy Laundry Machinery Company has also an agency here, and their washing-machines compete successfully against those of English and French manufacture.

The Gardner compensation governors, for regulating the speed of steam-engines, are highly favored by the leading engineers of this country, and getting to be largely in use.

Tarr & Wonson's copper paint, for the bottoms of vessels, and Prince's metallic paint for painting iron-work, are finding ready sale.

The imports of lubricating oil are increasing, but chiefly for re-export to Germany.

Remington type-writers are growing in favor and their sale extending.

The trade in school furniture and school slates is also well maintained.

The agent of the Singer sewing-machines writes to me that the general imports and sales of sewing-machines fell off considerably during the year 1885 as compared to 1884 and previous years, but that his own business experienced no diminution whatever, and therefore he considers himself justified in concluding that the competition, especially from Germany, has lost ground and is weakening.

EXPORTS TO THE UNITED STATES.

The herewith-transmitted tabular statements of the classified exports from this consular district to the United States during the year ended June 30, 1886, show that they were unusually large, exceeding those of any twelve-month on record, being in excess of $2,464,654.31 over the exports in the fiscal year ended June 30, 1885.

This great increase is principally accounted for by the very much larger shipments of Sumatra tobacco which took place during the year 1885–'86, and more particularly during the September and December quarters of 1885, as compared with those of same period in 1884.

I have already reported and would here again state that the exports of this article to the United States will be very much less during the current calendar or fiscal year.

Present indications, however, are that the shipments will be quite extensive again, and that the high prices and certain defects in quality do not deter American purchasers in sending large supplies to our markets.

It would also seem to deserve to be remarked that the increase in the exports is to a considerable extent also owing to the more important shipments of coffee and diamonds, the declared invoice value of the coffee exports in 1884–'85 having been only $408,732.50, whereas in 1885–'86 it was $867,085.18, an increase of over 100 per cent.; and the invoices for diamonds certified to at this consulate and shipped from here to the United States amounted during the year ended June 30, 1885, to but $211,634.84, whilst during the year ended June 30, 1886, diamond shipments ran up to $974,355.37.

The export of cattle for breeding purposes has largely diminished. It amounted to over 1,500 head for which invoices were certified to at this office during the year ended June 30, 1885, whereas but 744 head were shipped as per invoices certified to during the year ended June 30, 1886.

General imports into the Netherlands during the years ending December 31, 1884 *and* 1885—Continued.

Articles.	Standard.	1885.	1884.	Whence imported.
Steam engines, agricultural and other implements	1,000 kilograms	38, 352	38, 984	Belgium, France, Great Britain, Prussia, all others.
Stone	do	765, 506	912, 008	Belgium, Great Britain, Italy, Prussia, all others.
Sugar:				
Rough	do	128, 179	133, 252	Belgium, East Indies, Prussia, France, Great Britain, Hamburg, Surinam, &c.
All other	do	23, 395	21, 865	Belgium, France, Prussia, all others.
Tar and pitch	do	10, 750	10, 853	Belgium, Hamburg, Russia, Sweden, all others.
Tea	do	5, 020	4, 279	China, Great Britain, Dutch East Indies, all others.
Tobacco and cigars	do	45, 459	40, 149	America, Belgium, Bremen, France, Great Britain, Hamburg, East Indies, Prussia, &c.
Wine:				
In casks	do	27, 367	26, 840	Belgium, France, Great Britain, Hamburg, Prussia, Spain, all others.
In bottles	do	8, 983	9, 939	Belgium, France, Prussia, all others.
Wood:				
Timber and ship's timber	do	707, 925	801, 528	Belgium, Hamburg, Norway, Prussia, Russia, Sweden, all others.
Fine cabinet wood	do	11, 847	12, 697	America, Cuba, France, Great Britain, Hamburg, all others.
Dye-woods	do	23, 958	20, 948	America, Belgium, Great Britain, France, Curaçao, Hayti, Dutch East Indies.
Wools	do	30, 117	33, 508	Belgium, Great Britain, Prussia, Rio de la Plata, all others.
Yarns	do	43, 265	43, 691	Belgium, Great Britain, Prussia, all others.

Imports for consumption into the Netherlands during the years ending December 31, 1884 *and* 1885—Continued.

Articles.	Standard.	1885.	1884.	Whence imported.
Gold and silver wares:				
Gold wares	1,000 guilders	66	84	Belgium, Prussia, all others.
Silver wares	do	318	382	Do.
Grains:				
Wheat	1,000 hectoliters	6,864	7,454	Belgium, Hamburg, Prussia, all others.
Ryo	do	4,823	4,402	Belgium, Prussia, Russia, Turkey, all others.
Barley	do	2,801	2,163	Belgium, Denmark, Prussia, Russia, Sweden, all others.
Buckwheat	do	190	68	France, Hamburg, Prussia, all others.
Flour of wheat	1,000 kilograms	27,587	33,108	America, Belgium, Bremen, France, Great Britain, Hamburg, Prussia.
Flour of rye	do	21,682	18,188	Belgium, Prussia, all others.
Hemp, unhackled	do	16,827	13,136	Austria, Prussia, Russia, all others.
Hides, unprepared:				
Fresh	do	7	1	Belgium, all others.
Dried	do	8,907	9,088	Belgium, France, Great Britain, Dutch East Indies, Prussia, all others.
Salted	do	4,994	5,082	Belgium, France, Great Britain, Rio de la Plate, all others.
Hides prepared:				
Not stipulated	1,000 guilders	6,582	6,731	Belgium, Great Britain, Prussia, all others.
Lacked and shammy	do	160	208	Great Britain, Prussia, all others.
Honey	1,000 kilograms	987	1,119	America, Belgium, Bremen, Cuba, France, Great Britain, all others.
Indigo	do	1,870	1,667	Great Britain, Dutch East Indies, all others.
Instruments, music	1,000 guilders	463	487	Belgium, France, Prussia, all others.
Iron:				
Rough cast	1,000 kilograms	204,943	240,588	Great Britain, Prussia, all others.
Wrought, band, and sheet iron	do	104,340	120,030	Belgium, Great Britain, Prussia, Sweden, all others.
Rails	do	65,595	91,633	Belgium, Great Britain, Prussia, all others.
Gas pipes	do	34,782	29,047	Do.
Iron wares	1,000 guilders	2,675	2,862	Do.
Anchors and chains	do	210	374	Great Britain, all others.
Nails and spikes	1,000 kilograms	15,392	18,511	Belgium, France, Prussia, all others.
Lead, rough	do	9,813	11,701	Belgium, Great Britain, Prussia, all others.
Madder:				
Alizarine, dried racin	do	9	....	Italy, all others.
Unprepared, fine	do	130	98	Belgium, Prussia, all others.
Manure, guano	do	19,772	16,345	Belgium, Chili, Great Britain, Peru, all others.
Manufactures:				
Silk	1,000 guilders	452	590	Belgium, France, Great Britain, Prussia, all others.
Cotton, rough or bleached	do	2,714	3,274	Belgium, Great Britain, Prussia, all others.
Cotton, colored or printed	do	5,734	6,510	Do.
Linen, rough or bleached	do	811	881	Do.
Sail cloth	1,000 rolls	8,523	11,443	Belgium, Prussia, all others.
Wool, cloth, buckskins	1,000 guilders	2,077	2,157	Belgium, Great Britain, Prussia, all others.
Wool, all others not stipulated	do	5,060	5,554	Do.
Wool blankets	do	30	35	Great Britain, Prussia, all others.
Wool flannels	do	56	96	Belgium, Great Britain, Prussia, all others.
Knitted or woven clothes	do	1,330	1,275	Do.

Imports for consumption into the Netherlands during the years ending December 31, 1884 *and* 1885—Continued.

Articles.	Standard.	1885.	1884.	Whence imported.
Sugar:				
Unrefined	1,000 kilograms	110,995	122,763	Belgium, France, Great Britain, Hamburg, Dutch East Indies, Surinam, Prussia.
Refined:				
Melis	do	946	1,302	Belgium, Great Britain, Dutch East Indies, Prussia, all others.
Candy	do	269	331	Belgium, Prussia, all others.
Bastards	do	3,389	2,989	Great Britain, all others.
Sirup, molasses	do	1,833	995	Cuba, Great Britain, Surinam, all others.
Steam and factory implements	1,000 guilders	7,973	10,627	Belgium, France, Great Britain, Prussia, all others.
Tar	1,000 kilograms	6,620	7,919	Belgium, Hamburg, Russia, Sweden, all others.
Tea	do	2,169	1,770	China, Great Britain, Hamburg, Dutch Indies, all others.
Tin (rough)	do	9,186	9,280	Great Britain, Dutch East Indies, all others.
Tobacco:				
In leaf:				
American	do	8,067	9,408	America, Belgium, Brazil, Bremen, Great Britain, Hamburg, Prussia
European	do	1,232	2,577	Belgium, France, Great Britain, Prussia, all others.
Java	do	2,521	4,133	Great Britain, Dutch East Indies, all others.
All others	do	1,538	5,055	Belgium, Bremen, Great Britain, Hamburg, Prussia.
Cigars	do	48	47	Belgium, Cuba, Great Britain, Prussia, all others.
Wax, unrefined and tree wax	do	537	558	France, Great Britain, all others.
Wine:				
In casks	1,000 hectoliters	102,875	113,633	Belgium, France, Great Britain, Hamburg, Prussia, Spain.
In bottles	do	7,227	7,742	Belgium, France, Prussia, all others.
Wood:				
Timber and ship-timber:				
Unsawed	Tons	196,041	245,048	Hamburg, Norway, Prussia, Russia, Sweden, all others.
Sawed	do	147,662	165,547	Norway, Prussia, Russia, Sweden, all others.
All other				
Not sawed	1,000 guilders	4,999	5,078	Belgium, Norway, Prussia, Sweden, all others.
Sawed	do	4,067	4,247	Belgium, Prussia, Russia, all others.
Fine cabinet, unsawed	do	876	1,968	America, Cuba, France, Great Britain, Hamburg, all others.
Dye woods:				
Unsawed	1,000 kilograms	18,827	16,623	America, Belgium, Curaçoa, France, Great Britain, Hayti, Dutch East Indies, Hamburg.
Brazilian and Japan	do	124	126	Curaçoa, Great Britain, Dutch East Indies, all others.
Campeachy	do	47	417	America, Belgium Curaçoa, Great Britain, Hayti, all others.
Wools:				
Long-haired	do	5,047	5,802	Belgium, Great Britain. Prussia, Rio de la Plata, all others.
Combing wools	do	192	151	Do.
Short-haired	do	10,537	11,527	Do.
All other shreds of wool and of woolen yarns	do	1,250	991	Belgium, Great Britain, Prussia, all others.
Artificial wool	do	1,637	1,701	Do.
Yarns:				
Of hemp for weaving:				
Rough	do	368	389	Belgium, Great Britain, all others.
Bleached	do	96	1	Do.

General exports from the Netherlands during the years ending December 31, 1884 *and* 1885—Continued.

Articles.	Standard.	1885.	1884.	Whither exported.
Hardware	1,000 kilograms	208,714	293,924	France, Great Britain, Italy, Dutch East Indies, Norway, Prussia, Russia.
Hides, skins, leather	do	28,344	29,604	Belgium, France, Great Britain, Dutch East Indies, Prussia.
Meats	do	10,547	8,680	Belgium, Great Britain, Dutch East Indies, Prussia, all others.
Mercury	do	18,002	17,457	Belgium, France, Great Britain, Dutch East Indies, Prussia, Surinam.
Metals, unmanufactured and manufactured	do	530,811	408,862	Belgium, Great Britain, Dutch East Indies, Norway, Russia, Prussia.
Oils	do	142,398	128,025	Belgium, Dutch East Indies, Prussia, all others.
Ozier	do	2,965	2,928	Belgium, Great Britain, Hamburg, Prussia, all others.
Paper	do	83,181	33,386	Belgium, France, Great Britain, Hamburg, Dutch East Indies, Prussia.
Potato meal and manufactures thereof	do	23,092	18,185	Belgium, France, Great Britain, Dutch East Indies, Prussia.
Rags	do	15,223	15,183	Belgium, Great Britain, Prussia, all others.
Seeds	do	87,183	100,565	Belgium, Great Britain, Prussia, all others.
Sirups, molasses	do	24,449	19,623	Belgium, Hamburg, Prussia, all others.
Soot, grease, tallow, and lard	do	15,089	12,720	Belgium, Prussia, all others.
Spices	do	3,422	2,964	America, Great Britain, Prussia, all others.
Spirits	do	38,339	44,947	America, Belgium, Denmark, France, Great Britain, Hamburg, Italy, Prussia, Dutch East Indies, Surinam, Sweden.
Steam-engines, agricultural and other implements.	do	23,332	21,869	Belgium, Great Britain, Dutch East Indies, Prussia, all others.
Stone	do	124,810	109,399	Belgium, Hamburg, Dutch East Indies, Prussia, all others.
Sugar:				
Rough	do	89,158	39,136	Belgium, France, Great Britain, Hamburg, Prussia, Russia, Sweden.
All other	do	102,291	113,764	Belgium, Great Britain, Italy, Norway, Austria, Prussia, Surinam, Sweden.
Tar and pitch	do	18,069	16,269	Belgium, British and Dutch East Indies, Prussia, all others.
Tea	do	2,730	2,207	Belgium, Great Britain, Hamburg, Prussia, all others.
Tobacco, cigars	do	29,266	24,484	Belgium, Denmark, Prussia, Great Britain, all others.
Vinegar	do	1,672	1,986	Great Britain, Dutch East Indies, Surinam, all others.
Wine:				
In casks	do	14,610	13,693	America, Belgium, France, Great Britain, Hamburg, Dutch East Indies, Prussia.
In bottles	do	8,265	9,239	America, France, Great Britain, Hamburg, Japan, Dutch East Indies, Prussia.
Wood:				
Timber, ship timber	do	198,054	166,202	Belgium, Prussia, all others.
Fine cabinet-wood	do	7,013	5,970	Do.
Dye-woods	do	22,325	18,545	Do.
Wools	do	25,712	29,881	Belgium, Great Britain, Prussia, all others.
Yarns	do	26,084	24,649	Great Britain, Dutch East Indies, Prussia, all others.

Exports, free from export duties, from the Netherlands, during the years ending December 31, 1884 *and* 1885—Continued.

Articles.	Standard.	1885.	1884.	Whither exported.
Flax:				
Unmanufactured, not hackled or dressed	1,000 kilos	8, 984	7, 558	Belgium, Great Britain, Prussia, all others.
Rough, hackled and dressed	do	6, 616	5, 848	America, Belgium, Great Britain, Prussia, all others.
Hackled	do	289	49	Belgium, all others.
Fruits, all fresh	do	22, 698	14, 333	Belgium, Hamburg, Great Britain, Prussia, all others.
Glass:				
Window-glass	do	31	355	British East Indies, Great Britain, Dutch East Indies, Prussia, all others.
Mirror-glass	do	17	9	America, Great Britain, all others.
Glassware	do	2, 762	2, 983	Belgium, Great Britain, Hamburg, Dutch East Indies, Prussia, all others.
Bottles	do	973	1, 005	Belgium, Great Britain, Dutch East Indies, Surinam, all others.
Broken glass	do	603	729	France, Great Britain, Prussia, all others.
Grains:				
Wheat	do	257, 367	360, 189	Belgium, Prussia, all others.
Rye	do	143, 294	169, 747	Do.
Barley	do	68, 368	62, 812	Do.
Oats	do	89, 834	109, 158	Belgium, Great Britain, all others.
Flour of wheat	do	7, 290	3, 887	Belgium, Great Britain, Dutch East Indies, Prussia, all others.
Flour of rye	do	15, 156	13, 382	Prussia, all others.
Hemp, unhackled	do	8, 758	7, 893	Belgium, Great Britain, Prussia, all others.
Hides, unprepared:				
Dried	do	7, 166	5, 759	Belgium, France, Great Britain, Hamburg, Prussia, all others.
Salted	do	5, 875	6, 851	Belgium, France, Great Britain, Prussia, all others.
Honey	do	6	4	Belgium, Prussia, all others.
Indigo	do	1, 556	1, 184	Prussia, Russia, all others.
Instrument, music (piano)	do	24	28	Great Britain, Dutch East Indies, Prussia, all others.
Iron:				
Rough (cast)	do	186, 169	221, 301	Belgium, Great Britain, Prussia, all others.
Rough (band and sheet iron)	do	29, 966	38, 834	Belgium, Dutch East India, Prussia, all others.
Rails	do	58, 860	70, 073	America, Belgium, Great Britain, Italy, Dutch East Indies, Prussia, Russia.
Gas-pipes	do	2, 063	2, 922	Belgium, Dutch East Indies, Prussia, all others.
Iron wares (anchors and chains)	do	283	639	Dutch East Indies, all others.
Nails and spikes	do	15, 195	16, 424	Belgium, British and Dutch East Indies, Prussia, Surinam, all others.
Lead crude, flattened, or manufactured	do	6, 636	6, 030	America, Belgium, Great Britain, Dutch East Indies, Russia.
Madders:				
Alizarine and dried racin	do	23	....	Great Britain, Prussia, all others.
Unprepared, fine	do	1, 621	1, 416	America, Belgium, Great Britain, Hamburg, Prussia, Russia.
Garancine and colorine	do	27	64	America, Great Britain, Prussia, Russia, all others.
Manure, guano	do	13, 081	12, 675	Belgium, France, Prussia, all others.
Manufactures:				
Cotton:				
Rough or bleached	do	7, 712	8, 873	Dutch East Indies, Prussia, Surinam, all others.
Colored or printed	do	8, 222	1, 244	Do.
Wool:				
Cloth—buckskins	do	41	45	Belgium, Great Britain, Dutch East Indies, Prussia, all others.
All others not specified	do	227	827	Dutch East Indies, Prussia, all others.

Exports, free from export duties, from the Netherlands, during the year ending December 31, 1884, *and* 1885—Continued.

Articles.	Standard.	1885.	1884.	Whither exported.
Sugar:				
Unrefined	1,000 kilos	9,418	15,238	Belgium, France, Great Britain, Hamburg, Prussia, Russia, Sweden.
Melis	do	78,375	87,352	Belgium, Great Britain, Prussia, Sweden, Norway, France, Spain.
Candy	do	1,184	1,392	Belgium, Bremen, France, Great Britain, Norway, Prussia, all others.
Bastards	do	1,242	3,303	America, Belgium, Bremen, Great Britain, Hamburg, Java, Norway.
Sirup	do	12,277	11,328	Belgium, Hamburg, Prussia, all others.
Tin, crude	do	8,886	8,213	America, Belgium, France, Great Britain, Hamburg, Prussia, all others.
Tobacco:				
In rolls or leaf:				
American	do	182	74	Belgium, Denmark, Great Britain, Italy, Prussia, all others.
Domestic	do	1,101	856	Do.
Java	do	251	394	Belgium, Denmark, Great Britain, Prussia, all others.
All others	do	820	504	Belgium, Great Britain, Italy, Prussia, all others.
Manufactured	do	579	468	Denmark, France, Great Britain, Italy, Prussia, all others.
Cigars	do	444	440	Belgium, Great Britain, Dutch East Indies, Prussia, Surinam.
Vinegar	1,000 liters	107	173	Great Britain, Dutch East Indies, Surinam, all others.
Wax, unrefined, tree wax	1,000 kilos	619	503	Belgium, France, Great Britain, Prussia, all others.
White lead		5,920	6,095	Belgium, Hamburg, Dutch East Indies, Prussia, Russia.
Wine:				
In casks	1,000 liters	3,814	3,948	America, Belgium, France, Great Britain, Hamburg, Dutch East Indies.
In bottles	do	7,268	5,831	America, France, Great Britain, Hamburg, Japan, Dutch East Indies, Prussia.
Wood:				
Unmanufactured, timber and ship timber	1,000 kilos	73,919	64,959	Belgium, Prussia, all others.
Manufactured timber and ship timber	do	78,962	50,876	Do.
Fine cabinet wood, unsawed	do	3,838	3,525	Do.
Dye-woods:				
Not stipulated	do	13,811	12,168	Belgium, Hamburg, Prussia, all others.
Brazilet and sapan	do	311	72	Hamburg, Prussia, all others.
Campeche	do	1,400	2,067	Belgium, Prussia, all others.
Wools:				
Long-haired	do	12,188	14,029	Belgium, Great Britain, Prussia, all others.
Combing wools	do	611	736	Do.
Short-haired	do	795	1,415	Do.
Artificial wools	do	411	741	Do.
All other shreds of wool and of woolen yarns	do	471	282	Do.
Yarns:				
Hemp for weaving:				
Rough	do	330	160	Great Britain, Prussia, all others.
Bleached	do	2	2	Do.
Flax for weaving:				
Rough	do	848	464	Do.
Bleached	do	242	210	Do.
Flax and hemp for sewing	do	205	275	Prussia, all others.

Vessels and their tonnage entered at and cleared from the port of Amsterdam during the year 1885, *distinguishing sailing vessels from steamers and specifying their several nationalities.*

Nationalities.	Entered.				Cleared.			
	Steam.		Sailing.		Steam.		Sailing.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Netherlands	396	323, 955	127	60, 186	393	317, 406	126	67, 460
British	650	460, 874	42	46, 784	649	464, 660	46	47, 585
Norwegian	58	25, 886	119	44, 686	58	25, 886	112	43, 572
Swedish	15	10, 442	10	4, 615	15	10, 328	10	4, 615
Danish	8	7, 967	10	1, 845	8	7, 967	10	1, 752
German	75	58, 087	32	13, 182	74	54, 918	33	14, 604
Russian	4	1, 945	30	9, 363	4	1, 945	28	8, 263
Italian	......	....	7	6, 420	......	....	8	7, 178
Spanish	18	21, 291	......	....	18	21, 291	......	....
United States	......	....	2	1, 366	......	....	......	....
French	1	2, 461	2	338	1	2, 461	2	339
Greek	4	3, 699	......	....	4	3, 699	......	....
Belgian	1	727	......	....	1	727	......	....
Total	1, 230	917, 334	381	188, 735	1, 225	911, 288	375	195, 368
Total 1884	1, 150	773, 030	556	240, 706	1, 168	784, 670	560	238, 964

Value of declared exports from the consular district of Amsterdam to the United States during the four quarters of the year ending June 30, 1886.

Articles.	Quarters ending—				Total.
	Sept. 30, 1885.	Dec. 31, 1885.	Mar. 31, 1886.	June 30, 1886.	
Bulbs	$64, 557 32	$7, 692 86	$1, 897 98	$3, 030 60	$77, 178 76
Cattle	24, 585 60	13, 520 00	3, 500 00	11, 592 00	53, 197 60
Cheese	2, 203 99	3, 897 90	768 97	276 31	7, 147 17
Coffee	128, 365 85	241, 416 40	214, 471 99	282, 830 94	867, 085 18
Diamonds	129, 280 78	140, 978 26	372, 190 23	331, 906 10	974, 355 37
Fish: herrings, &c	8, 050 48	14, 819 58	4, 374 82	1, 690 14	29, 535 02
Gums, dammar, copal, &c	10, 497 14	3, 311 50	5, 357 69	....	19, 166 33
Hides and calf skins	5, 719 64	7, 633 68	2, 445 53	3, 216 89	19, 015 74
India-rubber	....	21, 049 90	13, 629 51	....	34, 679 41
Indigo	....	17, 882 96	....	....	17, 882 96
Iron, old rails	....	12, 593 48	32, 727 88	24, 863 88	70, 185 24
Mineral water	332 15	....	....	....	332 15
Oils, Haarlem, &c	2, 028 92	1, 965 19	2, 595 44	1, 679 08	8, 268 63
Rags	....	6, 874 22	3, 197 02	2, 708 00	12, 779 24
Rice	23, 183 36	10, 125 79	25, 613 57	29, 525 08	88, 447 80
Seeds, field and garden	33, 382 63	31, 046 62	2, 414 86	6, 284 32	73, 128 43
Spices, nutmegs, mace, &c	39, 360 57	23, 128 14	2, 589 92	29, 034 22	94, 112 85
Spirits, gin and liqueurs	17, 305 53	15, 417 15	11, 761 93	11, 237 85	55, 722 46
Sugar, beet	14, 011 86	9, 648 08	....	....	23, 659 94
Tin, Banka and Billiton	209, 856 85	86, 333 70	65, 503 68	41, 606 09	403, 300 32
Tobacco	1, 043, 630 12	1, 622, 924 64	198, 772 76	297, 125 44	3, 162, 452 96
Vegetables, fresh and pickled	5, 753 29	16, 721 94	545 76	1, 107 10	24, 128 09
Unenumerated or sundry articles	13, 270 13	29, 325 82	12, 031 17	16, 544 02	71, 171 14
Total	1, 775, 976 21	2, 338, 307 81	976, 390 71	1, 096, 258 06	6, 186, 932 79
Total for preceding year	921, 831 74	1, 059, 461 16	681, 715 32	1, 059, 270 26	3, 722, 278 48
Increase	854, 144 47	1, 278, 846 65	294, 675 39	36, 987 80	2, 464, 654 31

TRADE IN SUMATRA TOBACCO AT AMSTERDAM IN 1886.

The principal transactions in Sumatra tobacco at Amsterdam usually terminate shortly after the last one of the customary inscription sales, and which always takes place on or about the 1st of November of each year.

From the report of another broker I copy the following comparative statement, showing each year's Sumatra tobacco crop since the article has been cultivated on the island, or from 1865 to 1885, inclusive, and the proceeds of same each year, viz:

Year.	Bales.	Average price per one-half kilogram, United States currency.	Total value (about).	Year.	Bales.	Average price per one-half kilogram, United States currency.	Total value (about).
		Cents.				*Cents.*	
1865	189	60	$16,000	1876	29,034	62	$2,601,600
1866	174	45	12,000.	1877	36,517	51	2,724,000
1867	224	28	8,000	1878	48,264	51	3,760,000
1868	890	57	80,000	1879	57,566	47	4,120,000
1869	1,381	52	100,000	1880	65,018	45	4,500,000
1870	3,114	49	200,000	1881	82,356	46	5,800,000
1871	3,922	55	300,000	1882	102,045	55	8,520,000
1872	6,409	53	400,000	1883	93,505	53	7,000,000
1873	9,238	73	1,000,000	1884	125,496	57	10,960,000
1874	12,895	61	1,152,400	1885	124,716	56	10,800,000
1875	15,355	68	1,568,400				

The discrepancies in the number of bales and total value of the crop of 1885, as they appear in the foregoing statements, are not due to any mistake of mine, but are owing to the fact that the brokers out of whose reports they are copied do not quite agree.

The cost of production and additional expenses incurred in bringing and laying down the product in Holland are estimated to be from about 85 to 90 cents Dutch currency, or from 34 to 36 cents of our money, and it is therefore obvious how enormously profitable tobacco-raising is in Sumatra.

All through last season American buyers were in the market in larger numbers than ever before, and they were present, as a rule, immediately before, during, and after each one of the sales. Up to nearly the 1st of August their purchases were quite unimportant, so much so as to create the very general impression here that the exports to the United States in 1886 would experience a very great falling off, and would not be likely to amount to much over one-half of what they were in the preceding year 1885.

However, after the sale in July, which supplied the market with more desirable or suitable goods for American consumption than could be found among the lots which arrived and were sold before, and when it appeared to be certain that no immediate change would take place in our tariff on leaf-tobacco, purchases by American buyers increased very considerably, and so did shipments by local firms on consignment to their agents, at New York.

The very high prices which choice parcels commanded did not deter our countrymen from securing them, and, altogether, the trade kept up, and exports to the United States continued during the succeeding months of the year at such a rate as to show, at its close, that, after all, they amounted to but little less than they did in the previous year.

In 1885 the export of Sumatra tobacco from this port to the United States was the largest which has taken place in any one year since the article found a market in our country, and amounted to 24,269 bales, and represented an invoice value of $3,504,660.42.

for purposes of comparison, what the same was in 1885 and in 1884, as follows, viz:

Crops.	1886.		1885.		1884.	
	Cereals, &c.	Straw, &c.	Cereals, &c.	Straw, &c.	Cereals, &c.	Straw, &c.
Wheat	65.	60.5	76.1	73.5	73.1	73.8
Rye	59.2	51.7	72.4	72.1	72.6	76.3
Barley	63.9	60.9	67.1	65.6	66.5	65.3
Oats	78.5	77.4	66.5	64.1	58.9	58.1
Buckwheat	60.	53.4	30.9	36.5	57.8	57.6
Beans	65.6	64.9	42.5	43.9	47.8	48.5
Peas	57.6	57.6	50.7	53.1	60.7	57.6
Potatoes	61.6	....	75.2	....	82.2	....
Sugar-beets	50.9	....	55.6	....	70.5	....
Rape-seed	50.2	49.7	68.6	69.2	68.2	65.2
Caraway-seed	60.	57.1	63.4	....	60.	....
Canary-seed	62.8	62.2	65.1	64.	59.8	58.4
Chicory	73.9	....	67.	....	75.2	....
Flax	62.7	64.8	61.9	61.	66.1	65.9
Hemp	66.6	71.	64.	64.6	71.	72.
Tobacco	....	82.1	....	66.8	....	88.6
Mangelwurzel	63.7	....	59.7	....	68.6	....
Turnips	56.2	....	49.6	....	61.	....
Carrots	66.8	....	51.4	....	61.1	....
Clover	69.8	71.	57.5	59.5	64.9	64.5
Grasslands	77.8	78.4	55.8	61.5	72.8	72.8
Garden products	71.	....	64.5	....	70.9	....
Apples	37.	....	60.8	....	36.6	....
Pears	28.2	....	79.7	....	26.4	....
Cherries	55.2	....	66.4	....	38.5	....
Plums	58.	....	79.4	....	35.1	....
Strawberries	64.7	....	63.4	....	73.5	....
Currants	63.8	....	62.5	....	60.9	....
Flower-roots	66.7	....	65.4	....	69.5	....
Nurseries	72.7	....	67.	....	73.6	....
Flower-culture	73.	....	70.2	....	76.4	....
Woodlands	71.3	....	69.5	....	74.	....

NOTE.—As standard, indicating, and for comparison of, the results of the harvest, the figures 100 stands for an exceptionally favorable, say an excellent crop; 90, very good; 80, good; 70, fairly good; 60, above middling; 50, middling; 40, below middling; 30, small; 20, bad; 10, failed. The highest figures, as 100 and 90, and the lowest, as 10 and 20, do not apply to the above tabular statement, but have reference to the crop-results of certain products in some particular communes (*Gemeenten*), in which such results were obtained.

GENERAL SUMMARY REMARKS.

On comparing the figures for 1886 with those for 1885, it appears that a much superior result was obtained as to buckwheat, beans, turnips, carrots, tobacco, grasslands, and hemp, the latter only as far as the fibrine is concerned; a rather considerable increase was obtained as to oats, clover, and cabbage-gardens; and a slight increase over 1885 is to be recorded regarding the peas, flax, chicory, and mangelwurzel crops. About the same as in 1885 came out linseed and hemp seed, strawberries, currants, flower-roots, nursery and flower gardens and woodlands. Much inferior results than in 1885 were obtained as to rye, rape seed, apples, pears, and plums; the product of the latter three was about equal to that of 1884. The decrease in wheat, potatoes, and cherries was rather considerable, and the crops of barley, sugar-beets, caraway-seed, and canary-seed were slightly less than in the preceding year.

The quality of the product was generally satisfactory, and the year 1886, on the average, may be reckoned to the tolerably good ones, though some products gave cause of complaint. Cattle-breeders, who for a time had cause to complain because of the pastures being scantily provided, ought, on the whole, be satisfied.

The clover and grass crops were last year favorable to a degree that is but rarely equaled, and hay, principally the first cut, was nearly everywhere of superior quality.

Political reports of a more or less warlike character caused a little animation from time to time, but expectations as to a betterment in prices vanished about as quickly as they were cherished.

The "*Baissiers*" kept almost unremittingly at their game, in spite of the already low prices ruling, and they were supported therein by the favorable accounts regarding the condition of the growing crops.

Later on in the year less favorable reports as to the state of the crops came in from the country, and offers from abroad also became more limited.

About then "the trade," not only in grain, but in various other articles as well, began to realize that the climax of the "*Baisse*" operations had been reached; "*Baissiers*" were soon less numerous in the market and their movements restricted. The trade then became more buoyant and hopeful, and confidence in the approach of better times established itself, which at the close of the year gave very generally a more healthy tone to the business and more inclination to new enterprises.

THE WHEAT TRADE.

Transactions in wheat in the past year were somewhat more extensive than in 1885. The imports were larger; in part they were intended for transit, especially via the port of Rotterdam; another portion was imported direct for the mills in this country, leaving speculation to be confined to a very limited sphere.

As represented to me, the "*Baissiers*" in the article had for about two years very much their own way, and succeeded to keep down its price, causing it to be extremely difficult to re-establish a better feeling in the market. Nevertheless, better opinions began to obtain at last, and at about the end of the year a slight upward tendency in wheat prices could no longer be gainsaid. In consequence of deficient crops, especially in England and France (which countries, as is estimated, will together require to import about 80,000,000 hectoliters foreign wheat), the producing and export countries have or are raising the price of the article; and when it is taken into consideration that the price of wheat is still very low, it is not to be wondered at that importers and speculators are induced to renew and increase their operations. It is at this time confidently believed here by parties who understand the trade in question, that wheat purchases at the prices ruling at the end of the year 1886 involve no risk for the near future, as, even leaving out of sight the possibility of a European war, political complications are not likely to cease, and they are quite apt to cause advances in the price of the article under consideration.

What would further seem to point an improved tendency of the market consists hereof, that, what is ordinarily quite unusual during the latter half of the month of December, the demand for and transactions in the article increased, which is held to be a sign that there is great need for it.

It is said that at the same time England was buying heavily in the United States, Germany and France purchased but lightly, and particularly because importers in those countries mistrust the stability of the existing tariffs there, and are therefore likely to have to pay high prices for what at the close of the year could have been bought comparatively cheap.

The fluctuations in the course of the year were inconsiderable.

Transactions as to the imports of wheat from British India mostly took place by way of London.

Statement showing the countries and places whence rye and wheat were imported into Rotterdam and on the Maas, and the quantity from each during the last five years.

Whence imported.	1886.	1885.	1884.	1883.	1882.
RYE.	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*
St. Petersburg	30,490	1,610	7,459	6,966	2,989
Revel, Pernau, &c	2,981	2,434	5,574	11,895	6,441
Riga, &c	3,551	8,013	5,518	3,341	4,673
Libau and Windau	3,165	3,628	2,569	8,092	4,295
Prussian Baltic ports	6,475	9,276	3,704	16,863	15,919
Russian Black Sea ports	50,692	56,881	57,280	39,768	34,254
Turkey	14,415	7,033	18,068	14,338	16,886
America	305	1,826	7,121	3,280	1,735
Sundry places	35	....	175	....	1,123
Total	121,109	90,701	107,468	104,512	88,295
WHEAT.					
Russian Baltic ports	52,452	28,363	70,951	75,222	38,288
Prussian Baltic ports	39,915	34,879	12,424	8,271	9,529
Russian Black Sea ports	30,275	58,992	44,335	32,993	59,886
Turkey	9,789	5,217	6,088	8,384	1,828
America	12,791	1,571	27,724	2,894	16,522
India	4,972	3,800	6,200	11,168	12,643
Sundry places and indirect	556	1,604	2,258	350	200
Total	150,750	134,426	169,980	139,283	138,867

MAIZE.

The imports of Indian corn in 1886, from the United States and in general, also show an increase over those of the four preceding years, as will be seen by the following statement:

Whence imported.	1886.	1885.	1884.	1883.	1882.
	Lasts.	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*
New York, &c	12,088	8,787	5,955	6,534	1,967
New Orleans	1,667	2,109	....	993	....
Black Sea ports	5,141	1,627	8,231	5,193	3,889
All other	188	186	745	....	113
Total	19,084	12,709	14,931	12,720	5,969

The following statements show the lowest and highest prices of rye, wheat, and maize, as they ruled in the markets of Holland, for rye per 2,100 kilograms, for wheat per 2,400 kilograms, and for maize per 100 kilograms, during the periods therein indicated:

RYE.

Years.	Prime South Russian.		American.		Courland (118 pounds).	
	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.
	Florins.	*Florins.*	*Florins.*	*Florins.*	*Florins.*	*Florins.*
1877	175	240	....	....	200	285
1878	155	200	170	220	180	205
1879	156	215	165	240	166	225
1880	195	260	210	270	215	275
1881	185	245	240	262	230	265
1882	150	210	185	250	175	215
1883	155	172	190	200	170	180
1884	150	170	170	190	170	180
1885	120	155	155	170	145	170
1886	118	135	140	150	130	140

The favorable results of last year's American wheat crop, as regards quantity and quality, and the deficiencies in the yield of the crops of several European countries, placed our millers and exporters again in position easily and successfully to compete against the domestic as well as against certain foreign producers, and enabled them to supply wheat flour at prices so low that the latter, especially the Hungarian millers, had, comparatively speaking, the market shut against them.

The imports of ordinary or low grades of American flour were also quite considerable in 1886, and they also proved, as a rule, of better quality (*kräftigerer Backart*) than shipments of the same class goods received here in former years.

At about the close of the year, when prices of flour considerably advanced in the United States, and for lack of disposition here to speculate, transactions in the Amsterdam market became rather limited in the month of December.

Present indications point to a good trade in American flour during some months to come, but as to what it is likely to result in during the latter half of the year cannot now be predicted, as that depends very greatly upon the prospects and result of the crops of this year.

In this connection I would call the attention of our millers and flour exporters to the forthcoming Exhibition of Food at Amsterdam, May to October, 1887, so they may consider whether it might not be advisable to display here full and choice assortments of breadstuffs, &c. The exceptionally good quality of our last wheat crop might be a special inducement for them to participate, which, if it were done, might possibly prove very beneficial.

The following statement has been kindly furnished me by the collector of this port; it shows the imports at Amsterdam of wheat, rye, and other flour, and the countries and places wherefrom, in 1885 and 1886:

Kind of flour and whence imported.	1885.	1886.
	Kilograms.	*Kilograms.*
Wheat flour:		
England	841,717	211,863
Hamburg	1,874,058	2,056,456
Austria	....	10,000
Prussia	566,381	2,739,290
United States	6,847,137	9,240,436
Belgium	332,454	335,084
Total	10,461,747	14,593,129
Rye flour:		
Denmark	71,045	40,000
England	....	20,000
Hamburg	2,359,384	6,979,159
Prussia	6,113,453	7,755,376
United States	12,500	124,099
Total	8,556,382	14,918,634
Other sorts:		
Bremen	1,000	....
England	15,197	2,366
Hamburg	84,272	75,010
Prussia	1,209	5,890
United States	15,600	....
Belgium	7,725	745
Total	125,003	84,011

BACON.

The imports and trade in American bacon and other hog products at Amsterdam and in Holland have been since about 1881 decreasing from year to year.

The diminishing consumption of the articles, caused by the continued unfavorable condition in which the working and laboring population in city and country is placed, and the consequent decline in the price of the domestic product, are said to be the reasons why imports from the United States have so greatly fallen off.

TIN.

As reported to me by the principal firm trading in Banka and Billiton tin at Amsterdam, there is but little of any note or interest to be stated as relating to transactions in the article during the year 1886 in Holland. Hardly any speculative operations took place during that period; but there was a regular demand for consumption, which increased about per cent. as compared to 1885, whereas the production, as I am informed, has not quite kept pace therewith.

The stock on hand in Holland, England, and in the United States fell considerably short at the close of last year when compared to what it amounted to at the end of the previous year, 1885.

The prices ranged about 10 per cent. higher than they did in 1885.

The exports of Banka and Billiton tin from this consular district to the United States consisted, in 1886, of only 11,483 blocks, with an invoice value of $215,867.25, as against 25,328 blocks, valued at $389,703.46, in 1885, showing a decrease in the exports from here to the United States during the former year amounting to 13,845 blocks, and in value to $173,835.51.

Transactions in Banka and Billiton tin in Holland in 1886.

Stock, imports, &c.	Banka.		Billiton.	
	Blocks.	Tons.	Blocks.	Tons.
Stock and sailing, December 31, 1885	101, 286	3, 143	53, 252	1, [illegible]
Imported in 1886	120, 992	3, 755	80, 921	2, [illegible]
Total	222, 278	6, 898	143, 173	4, [illegible]
Sold and exported in 1886	134, 292	4, 168	80, 371	2, [illegible]
Stock on hand December 31, 1886	87, 986	2, 730	62, 802	2, [illegible]

The prices during 1886 were, on the 31st of each month, for Banka and Billiton tin, in this market, per 50 kilograms, less half per cent. discount, as follows:

Month.	Banka.	Billiton.	Month.	Banka.	Billiton.
	Florins.	*Florins.*		*Florins.*	*Florins.*
January	55¾	55¾	July	60	[illegible]
February	56¼	55¾	August	60	[illegible]
March	56¼	56	September	62	[illegible]
April	56⅛	56¼	October	61	[illegible]
May	58⅛	58¼	November	61½	[illegible]
June	62¼	61¾	December	59¾	[illegible]

COTTON.

The cotton trade at Amsterdam has not been prosperous in the course of the year 1886; the general depression and want of animation in the trade of most commodities, in most all markets, also limited transactions here, deadened the spirit of enterprise in the article.

In reviewing the past year's operations the most noteworthy and striking fact appears to be that the figures representing the same are so very insignificant.

The total transactions in this market ran up to only about 70,000 bales, of which quantity nearly one-half remained over from the previous year, or was stock on hand on the 1st of January, 1885.

The re-exports during the period covered by this report amounted to about 50,000 bales.

These are all very small ciphers, not only in comparison to other markets on the continent of Europe, but small even if considered in connection with the yearly consumption in this country.

It may safely be assumed, I understand, that about 50,000 bales of cotton are worked up in the mills of this country per annum, and it is stated to be a matter of regret to local importers that the manufacturers procure only a small proportion of their required supplies in this market.

In as far as the spinners import cotton from countries of production, it is held to be but in the natural course of affairs so to do, but they seem to be more or less reproached for drawing supplies from and patronizing the markets of Bremen, London, and even Antwerp

This is the more notable, when, at the same time, it is remarked that German and Swiss spinners purchase cotton in this market regularly, though only in limited quantities.

It is even brought to my notice that in certain cotton transactions it is becoming a rather common affair for Amsterdam merchants or agents to act as intermediaries between American or Indians exporters and German spinners; affairs which are considered as in reality outside of this market, as in which cases the cotton is sometimes not brought to this port at all.

A large proportion of the business in cotton here are transactions for "future delivery," which are said to be regulated and conducted in such a manner as generally to afford convenience and satisfaction.

As reported to me, heavy speculative operations took place at New York during the first weeks of the month of December, which were followed by similar transactions at London and Havre. This caused also considerable animation in the trade here and a rise in the prices. At the close of the year this little excitement had subsided again; the market was calm.

The following is a statement showing the imports of cotton—American, East Indian, and other sorts—during the past twenty-five years, or from 1862 to 1886, inclusive:*

Years.	American.	East Indian, &c.	Total.	Years.	American.	East Indian, &c.	Total.
	Bales.	*Bales.*	*Bales.*		*Bales.*	*Bales.*	*Bales.*
1862	924	6,761	7,685	1875	27,178	28,703	55,881
1863	....	6,791	6,791	1876	56,438	37,066	93,504
1864	585	14,073	14,658	1877	59,468	15,498	74,966
1865	106	13,904	14,010	1878	65,666	21,443	87,109
1866	3,155	26,723	29,878	1879	70,054	28,193	98,247
1867	6,881	20,589	27,470	1880	34,448	13,770	48,218
1868	17,427	37,299	54,726	1881	52,619	24,631	77,250
1869	15,116	50,994	66,110	1882	36,099	7,227	43,326
1870	30,955	25,011	55,966	1883	73,171	11,256	84,472
1871	119,976	43,212	163,188	1884	51,019	13,006	64,025
1872	59,763	103,424	163,187	1885	29,734	3,017	32,751
1873	42,519	24,168	66,687	1886	38,464	3,016	41,480
1874	40,276	19,398	59,674				

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* The weights of "bales" of cotton for the several countries are about as follows: United States, 49 pounds; Brazil, 100 pounds; Levant, 360 pounds; India, 290 pounds.

The weekly price notations at Amsterdam in 1886 were as shown i the following statement, per half-kilogram, in Dutch currency, viz:

Date.	Middling American.	Good fair Oomra.
	Cents.	*Cents.*
January 9	28	23
January 16	28	22
January 23	28	22
January 30	27¾	22
February 6	27⅛	22
February 13	27⅛	22
February 20	27	21⅛
February 27	26⅛	21
March 6	27⅛	21⅛
March 13	27	21⅛
March 20	28	22
March 27	27⅛	22
April 3	27⅛	22
April 10	28	22
April 17	28	22
May 1	28	22
May 8	27¾	22
May 15	27¾	22
May 22	27¾	22
May 29	27¾	22
June 5	27¾	22
June 19	27¾	22
June 26	27¾	22
July 3	28¼	22
July 10	28¾	22
July 17	28¾	
July 24	28¾	
July 31	29	
August 7	29	
August 14	29	
August 21	29	
August 28	29	
September 4	28¾	
September 11	28¾	
September 18	29	
September 25	29	
October 2	29⅛	
October 9	29¼	
October 16	29	
October 23	29	
October 30	29	
November 6	29	
November 13	29	
November 20	29	
November 27	29	
December 4	29¼	
December 11	29¼	
December 18	29¼	
December 31	29	

RICE.

Operations in this article in Holland in 1886 were not characterized by any improvement as compared to what they were in 1885, in which year the rice trade, which for some years previously had been rather prosperous, became seriously affected by the general depression in business and other surrounding circumstances.

The market showed throughout the year but rarely any signs of activity and firmness, but the usual weekly and monthly reports referred to rice as weak, dull, and inactive.

As causes of the unsatisfactory condition of transactions in the article are assigned, the great abundance of competing articles of food and consequent low prices; the poor quality of Burma rice, of which many cargoes arrived unfit for hulling, and could only be sold for animal food: the large Java crop of 1885, resulting in continued large imports and a decline in prices, particularly of "Java tafel."

The decline in some sorts of this product (Java) amounted to about 30 per cent., without inducing the least speculation.

Sales of hulled and polished goods—though prices were low, seldom paying to rice-millers—were languishing and difficult to be effected throughout the year.

The total imports into Holland amounted in 1886 to 1,212,000 bags, consisting of:

	Bags.
Bassein	403,000
Rangoon	357,000
Japan	224,000
Necransce, &c	95,000
Java tafel	84,000
Java	49,000
Total	1,212,000

In 1885 the total imports footed up 1,097,000 bags, and in 1884 they were 1,240,000 bags.

The stock of rice in Holland on the 31st of December of each of the last five years, consisted:

	Bags.
1882	7,374
1883	4,000
1884	3,141
1885	21,163
1886	43,254

The exports of rice from this consular district to the United States in 1886 decreased by more than one-half compared to what they amounted to during each of the two previous years. In 1886 they consisted of only 14,295 bags, represented by an invoice value of $73,276.08, as against 30,375 bags, valued at $214,531.51, in 1885, and 34,579 bags, valued at $208,403.22, in 1884.

INDIGO.

The stock of this article on hand, in this market, at the beginning of the year being very small, importers of it held out for high prices, which caused transactions to be unimportant until the month of March, when about thirteen hundred chests were offered at public sale.

Owners met the wants of the market.

The entire quantity offered was sold, but at low figures; 12 to 15 cents, American, per half-kilogram beneath those obtained for similar qualities and disposed of at auction in April, 1885.

Large arrivals of new crop indigo continued until July, when the stock consisted of forty-six hundred chests; in the mean time the market remained depressed. Unfavorable reports regarding the British India crop then began to improve the state of the market, and at the low prices ruling, a rather considerable and satisfactory business resulted, and was maintained during the second half of the year.

Java indigo being considered the cheapest of all kinds, as I understand, consumers all through Europe procured their supplies in great part in this market.

However, and as in the previous year, there was but little demand for the higher grade goods, whilst the low and cheap grade could be readily sold.

The imports of Java indigo into Holland reached a higher figure in 1886 than has been the case for a great many years. This is said to have been partly owing to increased production, and to the fact that shipments from Java direct to consuming countries amounted to considerably less than in former years.

The following statement shows the imports of Java indigo into Holland, and for transshipment to different countries on the Continent, during the years 1884, 1885, and 1886, in chests of about 140 pounds each, viz:

Years.	Imports.	Transit.	Stock in first hands December 31.
1884	6,474	4,875	2,886
1885	8,380	9,651	1,621
1886	9,601	8,904	2,318

The imports of indigo from British India and Guatemala were, as usual, very unimportant and can hardly be put under figures.

The exports of Java indigo from this consular district to the United States were last year, and have been in fact up to the present time, very trifling; only some experimental shipments as it were have taken place, and it is stated to me by importers here that if American consumers would give the article a more serious trial, they would be apt, like the French and German, to use it more extensively.

DYE-WOODS.

Operations in dye-woods, on the decline for some years last past, have not revived in 1886.

The imports during the year were very small, and as there remained hardly any stock on hand at its close, there arose a somewhat better demand, but it is said that higher freights are apt to prevent large imports.

DIVI-DIVI.

Though the imports of this article amounted to less than in 1885 and to hardly one-half of what they were in 1884, the demand for it did not increase; on the contrary, prices for some ruled lower than in the preceding year.

Philadelphia bark.—Remained slow of sale and with little inquiry throughout the year.

Extracts of dye-wood.—In moderate demand.

Madder.—This article found a fairly ready market throughout the year, without, however, securing really paying prices to the farmers who cultivate it, and whose generally unfavorable condition induced them to accept any fair offer for this as well as for any product of the soil or the farm. The new crop is estimated at about 3,000 casks.

SPICES, GUMS, ETC.

Through the failure of the crop of nutmegs and mace in India, imports were smaller than usual. The prices, however, remained about the same as in 1885 during the early part of the year. Later on the market became much more firm; stimulated by considerable demand for consumption and speculation, prices advanced. Imports of pepper, cloves, cinnamon, and cassia were small, with a general upward tendency in prices.

The imports of East India gum-elastic and gutta-percha were rather extensive, and found buyers at prices satisfactory to importers.

Gum copal, the imports of which amounted to about 1,500 tons, was in good demand throughout the year. Gum damar, of which about 4,000 cases were imported, sold at constantly advancing prices. For these varnish gums the Dutch market takes the lead in Europe, being now more important than London.

CINCHONA BARK.

The imports of this article (Java product), were fully as important as in previous year, 1885, with prices almost steadily declining. About 650 tons were sold here at public auction, attracting, as usual, the attention of manufacturers of quinine.

AMERICAN TOBACCO.

In former times the imports of American leaf-tobacco of different sorts into Holland were very large. The trade therein and the consumption of it, in this country, has declined very greatly, and is now comparatively insignificant. The cause, no doubt, is the great development of the tobacco culture in the Dutch colonies of Sumatra and Java during recent years, and the importations and consumption for various purposes of very low grade and very cheap tobaccos from several other foreign countries, and which, in many cases, are substituted or used in place of American tobacco.

The following statements show the stock on hand of American leaf-tobaccos on the 31st of December, 1885 and 1886, and the imports and sales in 1886, at Amsterdam and Rotterdam, viz:

Stock, imports, &c.	Amsterdam.			Rotterdam.			
	Seed-leaf.	Maryland.	Kentucky and Virginia.	Seed-leaf.	Maryland.	Virginia.	Kentucky.
	Cases.	*Hhds.*	*Hhds.*	*Cases.*	*Hhds.*	*Hhds.*	*Hhds.*
Stock on hand December 31, 1885	318	1,832	201	23	556	67	104
Imported in 1886	1,547	2,914	196	2,162	4,379	624	766
	1,865	4,746	397	2,185	4,935	691	870
Sold in 1886	1,625	3,754	280	1,678	4,418	568	648
Stock on hand December 31, 1886	240	992	117	507	517	123	222

THE COFFEE TRADE IN HOLLAND IN 1886.

Few articles of commerce proved, during the year 1886, so profitable and generally satisfactory to the trade of this country as did coffee.

The rather sudden and almost unprecedentedly great rise in the price of the article, which was not and could not well be foreseen during the first half of the year, and which set in in the second semester, found this market well stocked with coffee, consisting, however, in great part, of fancy sorts (so called by the trade), which were less affected by the advance in the price.

Thus it came that the Dutch market, whilst realizing handsomely by the year's transactions, was not, it is said, benefited thereby to the same extent as were Havre, Hamburg, and other markets.

The course and rise in the prices which brought about such favorable results were from 24½ to 25½ cents, Dutch currency, for good ordinary Java (the generally accepted basis in determining the value of coffee in Holland), per half kilogram, up to the month of June, in which month it brought, at an auction sale, as much as 27½ cents, purchases being looked upon as venturesome. Three months later the same goods were on all sides bought up at 34½ to 35 cents. A little reaction followed this agitated state of the market in October, when the price receded to 32 cents, whereafter a steady upward tendency characterized transactions, until in December it had reached 41 cents.

During the usual period of inactivity about the holidays, the value of the goods at about the end of December was quoted at 39½ cents, the market closing at 40 cents at the end of the year with a lively demand and favorable prospects for the beginning of the new year.

Stock on hand at end of December 1886, 1885, *and* 1884.

Stock.	1886.		1885.		1884.	
	Bags.	*Cases.*	*Bags.*	*Cases.*	*Bags.*	*Cases.*
Stock represented by "cedules" or warrants in circulation	270,683	628	287,832	440	334,549	[illegible]
Unsold stock in hands of Netherland Trading Company	151,000	279	445,600	1,059	427,500	[illegible]
Stock of East India coffee in hands of private parties	79,500	....	118,200	28	154,200	....
Stock of West India coffee in hands of private parties	700	....	6,300	....	1,300	....
Total	501,883	907	857,932	1,527	917,549	[illegible]

Sailing from East India end of December 1886, 1885, *and* 1884.

For—	1886.	1885.	1884.
	Bags.	*Bags.*	*Bags.*
Netherland Trading Company	167,000	43,700	[illegible]
Private parties	26,100	29,400	[illegible]
Total	193,100	73,000	[illegible]

Deliveries from January 1 *to December* 31, 1886, 1885, *and* 1884.

By—	1886.		1885.		1884.	
	Bags.	*Cases.*	*Bags.*	*Cases.*	*Bags.*	*Cases.*
Netherland Trading Company	780,685	4,354	916,783	5,361	828,306	[illegible]
Private parties, first hand	399,700	361	447,700	529	428,800	....
Total	1,180,385	4,715	1,364,483	5,890	1,257,106	[illegible]

The sales at auction by the Netherland Trading Company (Government agents) amounted, during the year ending December 31, 1886, to 760,223 bags and 4,542 cases, as against 862,753 bags and 4,696 cases in 1885, and 932,183 bags and 7,806 cases in 1884.

The stock on hand by private parties (first hand) at Amsterdam and Rotterdam at the end of December, 1886, consisted of: Java, 62,668 bags; Padang, 300 bags; Macassar, 16,542 bags; Santos, 670 bags; total, 80,180 bags, as against end of December 1885, 124,530 bags, and 155,501 bags in 1884.

Consumption of coffee in the several countries during the first eleven months of the years 1886, 1885, *and* 1884.

Countries.	1886.	1885.	1884.
	Tons.	*Tons.*	*Tons.*
Germany	113,643	110,778	101,773
France	61,821	62,355	61,211
Austria-Hungary	33,856	34,173	[illegible]
Great Britain	13,425	13,897	[illegible]
Belgium	24,567	24,330	[illegible]
Switzerland	9,020	7,430	[illegible]
United States	214,630	211,617	[illegible]
Total	470,962	464,589	[illegible]

Stock of coffee on hand in the principal markets of Europe on the 31st of December of the years 1886, 1885, and 1884.

Countries and places.	1886.	1885.	1884.
	Tons.	*Tons.*	*Tons.*
Netherlands	30, 150	51, 550	55, 200
England	14, 400	17, 050	21, 150
Hamburg	16, 500	19, 000	18, 500
Antwerp	7, 200	11, 250	9, 000
Havre	44, 450	72, 950	58, 950
Bordeaux	2, 500	5, 700	6, 200
Marseilles	2, 150	5, 200	4, 550
Trieste	6, 500	8, 000	10, 850
Total	123, 850	190, 700	184, 400

The purchases of coffee in this market (Amsterdam) for or on American account, and exports of the same from this consular district to the United States, fell off very greatly since the higher prices for the article set in; the value of the shipments being represented by the amount of $497,302.93, from January 1, to June 30, whereas only $338,047.08 worth were shipped from July 1 to December 31.

In all, the value of the exports from here to the United States during the year 1886 foot up $835,350.01, the same having been represented by the sums of $682,570.19 in 1885 and $427,527.78 in 1884.

The fact that several American coffee-importing houses have sent and established their own representatives here, to attend the sales and make purchases and shipments, does not appear to be viewed with entire equanimity by some of the commission firms in the article at Amsterdam. They seem to consider it to be quite in the natural course of business affairs for houses which buy regularly, or frequently and largely, to have their own men here looking after their interests, but others, such as draw but casually supplies from this market, and then not in very great quantities, would, according to their say-so, do far better to intrust their orders to some reliable and well-known commission house here. All this, however, is, strictly speaking, "none of my business," and therefore I leave it to be considered and judged by those whom it concerns.

The markets of this country have during the year covered by this report proved themselves to be good and available for Americans in the coffee trade to sell in as well as to buy in. At any rate, if I am correctly informed, as I believe to be the case, there were considerable quantities of Macassar coffee brought from New York during the latter half of last year and disposed of at good and remunerative prices. Several consignments of Bintenzorgsche coffees, purchased by Americans in and shipped from Java, also came here, and were sold at good advantage to the owners.

In contemplated future undertakings of this description our coffee merchants and speculators in the article must not overlook the important circumstance that an upward movement or increase in the price of coffee, amounting to about 60 per cent., within about six months' time, as happened last year (June–December), is an occurrence quite out of the common, and almost unknown in the history of the coffee trade.

Another apparently noteworthy fact, relating to the increasing exports from here to the United States is that purchases and shipments are being no longer confined to just a few well-known and long-favored sorts of coffee, but that others of generally acknowledged good quality, such as "Sagal," "Solo," and large-bean "Pangool," are now also being freely exported to our markets.

The crop of 1885–'86 was considered a very good one for Java planters, excepting those of Middle Java and Preanger, amounting in quantity to about 300,000 bags, while the Government plantations yielded about 810,000 bags.

Reports from Java speak of the "leaf disease" as having greatly abated. But the crop prospects for 1887 are, on all hands, so far as Java is concerned, represented to be exceedingly gloomy. It is said that the heavy early rains have greatly damaged all second blossoms, and destroyed to a great extent the on-coming or young fruit of the first blossoms.

The Government, as I understand, has not published any estimate yet as to the probable outcome of the new crop, but from best-informed sources here I hear that it will hardly amount to much over one-half of the crop of 1886, notwithstanding that many new plantations will bring their first crop into the market.

THE SUGAR TRADE AND INDUSTRY OF THE NETHERLANDS IN 1886.

A prominent firm of brokers in sugar, at Amsterdam, and which generally publishes an annual trade review relating to the article, has, respecting transactions in the same during the year 1886, published only some tabular statements, showing the volume of the commerce, imports, and exports, &c., and price notations, and which appeared, laconically prefaced, as follows, viz:

> We again deem it to be superfluous to furnish a detailed review of the sugar trade, and confine ourselves to giving only some statistics and figures, as below.
>
> They will sufficiently indicate the commercial movement and the course of the prices during the past year, and it will require no further explanation from us in order to illustrate that, with imports reduced to a minimum, and thereby the almost entire export trade of colonial sugar lost, with the greatly diminished exports of "refined," and the temporary shrinkage of operations in our refineries, as consequences or results of the formidable competition of other enormously protected and exorbitantly bounty-fed sugar-producing countries and continued low prices, the sugar trade has been carried on under difficulties, and caused many of those therein engaged vexation and loss.

I might perhaps have assumed with equal propriety that the above sufficiently illustrates the conditions prevailing and surrounding the commerce, industry, and general sugar interests of Holland, particularly as the subject, in all its phases and as concerning the principally interested countries, has been for some years last past everywhere so extensively written about and discussed, but that so doing would not quite content me will be observed by what follows in this report, and more especially from the inclosure which accompanies it.

The inclosure here referred to consists of a communication on the subject under consideration, addressed to me by J. H. G. Ferman and J. Peelen, esquires, directors of the "Dutch Sugar Refinery," of Amsterdam, upon a request of mine to supply me some data or information on the sugar trade and industry of Holland in 1886, to be used in my report for said year.

I was greatly surprised to receive from them so full and interesting statements as form their reply, and which, being in the English language, and in their entirety at my disposal for any purpose, I concluded it would be best to transmit in the original.

The directors evidently prepared their communication to me in the Dutch language, and in so far as it contains any faults it is, in my opinion, in consequence of its having been poorly translated afterwards.

The high character and standing of the gentlemen from whom the inclosure herewith emanates, and their great experience in matters touching the sugar industry and trade of this country and of the sugar question in general, lead me to believe that their statements upon the subject, so far as they represent them as facts, are perfectly correct and deserving of the fullest confidence, and that whatever they state as mere matters of judgment or opinion is entitled to respectful consideration.

I would call particular attention to what is stated on page 7 of the inclosure and which has reference to or says "that there are rumors of the probability of the American sugar duties being abolished, and what, in such case, would be likely to be the effect thereof."

In this connection I am reminded of a remark made to me by a gentleman heavily interested in the sugar trade, which appeared to me to be even more suggestive than I found it to be facetious, and which I would venture to repeat in this place. He said:

> It was certainly wisdom on the part of the American Congress to make tea and coffee duty-free; but tea and coffee never are, or will be, really sweet until sugar is added thereto. Do you think your Government will speedily take off the duty on sugar?

My answer was about to the following effect:

> The present condition of the American national finances, or rather the state of our national Treasury, seems held to be such as to make it desirable or necessary largely to reduce our national revenues. This is likely to be brought about by Congress in one or another form, and if perchance the sugar duties should be abolished, and thereby many millions of dollars withheld from the United States Treasury, it should, and undoubtedly only will be done, if satisfactorily shown that these millions will stay in our country, will benefit the American consumer of the article, &c.

I conceived this to be a proper and as good an answer as I could make, but it did not quite meet the gentleman's approval, as he rejoined by saying "that I was a little too selfish, and that he hoped Congress would be more liberal." This led me to telling him that I always adhered to and acted upon the principle that it is the duty of a good citizen, be he an officer or legislator, to serve the world at large in such matters if at any time in his power, and whenever it can be done without being at the cost or to the injury of his own country, or fellow-citizens, but not otherwise. In this statement he acquiesced.

I shall make no further effort to enlarge on the subject of this report, as there remained altogether but little for me to say, unless I fell into the error of repeating some of the facts or figures, &c., contained in the inclosure herewith. I therefore conclude after adding the following few tabular statements, viz:

Destination of the exports of sugar from Java in 1885 *and during the first ten months of* 1886.

Whither exported.	1885.	1886.
	Piculs.	*Piculs.*
Netherlands	39,586	8,029
England and canal for orders	4,103,551	2,168,464
America	79,196	44,336
Australia	153,864	57,234
France, Mediterranean ports, &c	2,201,286	1,212,233
China	....	312,872
Total	6,577,483	3,803,168

Imports by, and the consumption of, beet-root sugar in the Dutch refineries in 1885 *and during the first eleven months of* 1886.

Description.	1885.	1886.
	Kilograms.	*Kilograms.*
Foreign product	101, 750, 000	74, [illegible]
Home product	15, 500, 000	22, [illegible]

Extent of beet-root sugar culture of Europe in 1885–'86 *and* 1886–'87, *according to results and estimates of Mr. Licht, of Magdeburg.*

Countries.	1885–'86.	1886–'87.
	Tons.	*Tons.*
Germany	825, 081	850, [illegible]
France	298, 407	500, [illegible]
Austria	377, 032	325, [illegible]
Russia	537, 860	475, [illegible]
Belgium	48, 421	80, [illegible]
Netherlands, and others	37, 500	50, [illegible]
Total	2, 124, 301	2, [illegible]

The following are comparative statements of price notations of sugar in 1885 and 1886, in the Dutch market, per 100 kilograms:

Months.	Java sugar (No. 14 basis).		Beet-root sugar.		Refined sugar.	
	1885.	1886.	1885.	1886.	1885.	1886.
	Florins.	*Florins.*	*Florins.*	*Florins.*	*Florins.*	*Florins.*
January	18¼	21 to 22	12 to 14	16¼ to 19	17½ to 19½	20¼ to [illegible]
February	18¾	21 21½	13¼ 15	15⅛ 17¼	18¾	19 [illegible]
March	19	19 20	14⅝ 15¾	14⅝ 16	18⅜ 19	18⅝ [illegible]
April	18½	19 20	14⅞ 16⅜	14¾ 16¼	19 21¼	19⅝ [illegible]
May	17¾	20 21	15¾ 20⅛	14 16	20 20¾	18 [illegible]
June	22 to 23	18 19	18¼ 20⅛	12¾ 13¾	23 23¾	16⅝ [illegible]
July	23	18 19	17 19⅛	13¼ 14¼	20¼ 22	17⅜ [illegible]
August	22½ to 23	18 19	17¾ 19⅝	13⅛ 14⅛	20¾ 23½	17¼ [illegible]
September	24	18 19	18⅜ 20⅜	13⅜ 14⅝	23 24	17⅛ [illegible]
October	24	18	16¾ 19	12⅛ 13⅞	20¼ 22⅝	17 [illegible]
November	22½ to 23	17	16⅜ 18⅛	12⅝ 13¼	19⅝ 22	16⅞ [illegible]
December	22⅜ to 23	17	17⅜ 19	13⅛ 13¾	20⅜ 21¾	17 [illegible]

AMSTERDAM, *January* 28, 1887.

SIR: Referring to our letter of 15th last month, we now beg to offer you, according to your wishes, some information as to the Dutch sugar trade during 1886, hoping they may prove available for your consular report covering said year.

In order to put away one of the impediments to the imports of cane-sugar from our own colonies (Java and Surinam) for refining purposes, a bill has been passed, on the 29th of August, 1886, which, leaving unaltered the figure of 1¼ per cent. for waste on refining beet-sugar, allows 2¼ per cent. on refining cane-sugar in lieu of the 1¼ per cent. having existed for the latter description up to said date.

Before this bill was submitted to the Chambers, Dutch refiners had pointed out to their Government that in their practice 2¼ per cent. had already proved insufficient to cover the loss on refining cane-sugar, as well as 1¼ with beet-sugar, although this percentage is more adapted to the practical out-turn than the first named, and that of course the bill could not realize the prospects intended by the Government.

As suggested by the refiners, the increase of 1 per cent. has had no effect, only 1,103 tons of cane-sugar having been imported in 1886, almost entirely for the retail trade, *i. e.*, as raw sugar for direct home use, Dutch refiners preferring beet-sugar as raw material with an allowance of 1¼ per cent. to cane with 2¼ per cent. The question whether cane-sugar can be imported for refiners' use properly is not, in the first place, depending on the allowance being raised quite up to the virtual waste on refining, but, above all, is coherent with our Dutch duty system to this effect, that Java sugar cannot get within the reach of the Dutch refiners as long as the actual duty system prevails or until the sugar duty is being repealed.

According to the official returns, the quantity of duty-paid raw sugar imported during 1886 amounted to 87,015 tons, supplied by the following countries, viz:

		Tons.
Belgium		42,034
Germany and Austria		40,566
United Kingdom		628
Java		439
Surinam		664
All other countries		2,684
		87,015
Further raw beet-sugar grown in the Netherlands		26,621
		113,636
The yield in loaf-sugar and bastards of these can be estimated at about		100 000
To which, adding loaf-sugar, candy bastard:	Tons.	
The import of foreign refines in 1886	6,648	
The stock in bond of refines on ultimo 1885	9,163	
		15,811
		115,811
From which, deducting loaf-sugar, candy, and bastard:	Tons.	
Exports of Dutch refines in 1886*	75,368	
Stock in bond of refines ultimo 1886	3,612	
		78,980
Balance		36,831

This represents our home consumption in 1886, being per inhabitant about 8⅜ kilograms (population of the Netherlands, 4,400,000).

Our imports of raw and refined and our exports of refined have been during the last years as follows:

Years.	Raw imports.	Imports of refined.	Exports of refined.
	Tons.	*Tons.*	*Tons.*
1885	139,382	4,624	80,801
1884	136,263	4,597	92,047
1883	121,222	2,797	72,146
1882	95,394	1,898	62,826
1881	107,623	....	62,626
1880	113,884	....	66,470
1879	104,638	....	69,493
1878	106,005	....	65,541
1877	102,154	....	63,056

Up to the 1st of September, 1884, duty on raw has been levied according to its color; on said date this wrong system has been abolished and a more rational one introduced, based on the (assumed) real yield of raw. This yield was arrived at by analysis, the polarizations-degrees, less four times the ash and twice the glucose, indicating a theoretical yield, from which 1¼ per cent. was deducted to cover the (assumed) waste on refining; the balance left being considered by the fisc to be the real factory-yield in white dry loaf-sugar, on which a duty is assessed of 27 Dutch florins per 100 kilograms.

On export a drawback is allowed to the same amount, and on import an equal sum is imposed, say in both cases 27 Dutch florins per 100 kilograms for loaf sugar or other white dried goods, and for bastards proportionately lower. This system of taxation has, however, been much objected to by our refiners on account of, in many instances, the 1¼ per cent. not being quite up to the waste incurred on refining, or of the coefficient four for ash not being sufficient (the trade allow five times). The claims for better factors have, however, not been agreed to by the Government.

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* This quantity has found an outlet to the United Kingdom, 53,267 tons; Belgium (chiefly in transit to River Plate), 13,160 tons; Scandinavia, 3,310 tons; Germany and Switzerland, 4,653 tons; France, 250 tons; other countries, 728 tons; total, 75,368 tons.

By the introduction of this system any bounty formerly existing has disappeared, and the proceeds collected from the sugar duty by our Government have considerably advanced. The revenue from this source was as follows:

[Duty, 27 florins per 100 kilograms loaf-sugar.]

Years.	Amount.	Assessment basis.
	Florins.	
1886	7,991,000	On polarization basis.
1885	7,880,000	
1884	5,847,000	On color basis.
1883	6,272,000	
1882	7,405,000	
1881	6,488,000	
1880	5,873,000	
1879	6,541,000	
1878	6,491,000	
1877	6,133,000	

In a note placed by your Department at Washington under your report of the Dutch sugar trade covering 1885, the observation has been made that there is a misapprehension in representing your Government to give a bounty on exported refined, only a drawback being allowed. The rectification is correct. However, if we see well, the very drawback (of 2.82 cents) included a large bounty, as the reduced one of 2.60 cents still leaves a fair benefit to your exporting refiners. To show this, we beg leave to submit to you the following calculations of the relative results of the drawback system in your country and ours.

The comparison is based on the Dutch drawback, being the right equivalent of the duty assessed on raw, and of course not leaving an export bonus whatever to Dutch refiners.

In both cases are taken 100 pounds beet-sugar, first runnings, containing 95.5 crystallizable sugar, 1°.15 ash, and 0°.00 glucose.

DUTCH SYSTEM.

Polarization	95°.5
Less 4 times 1°.15 ash	4°.6
	90°.9
Less neglected fractions (on an average)	0°.5
Theoretical yield	90°.4
Less 1¼ per cent. for waste on refining	1°.3
	89°.0

Duty on 100 pounds raw of the above quality is settled by export of 89.05 pounds white, hard-dried, refined sugar (loaves, crushed, granulated, or any other shape). On sirup drawback is not allowed.

UNITED STATES SYSTEM.

Duty.

75°	polarization, at 1.4 cents per pound	$1 [illegible]
20°.5	polarization, at 0.4 cents per pound	[illegible]
95°.5		[illegible]

Drawback.

Loaf-sugar yield,	89.05 pounds, at 2.6 cents, less 1 per cent. = 2.574	$2.2921
Sirup,	7.70 pounds = 0.534 gallons, at 4 cents	0.021
Waste,	3.25	
	100.00 pounds	2.3135

Accordingly an export of 89.05 pounds white sugar (loaf, &c.) settles the refiners' debt for duty on 100 pounds raw, and, including his drawback on sirup, still leaves him a bounty of 9.35 cents per 100 pounds raw, equal to 10.52 cents per 100 pounds refined, or about 3¼ per cent. of the actual value of sugar. A similar result the American refiner arrives at on melting, instead of "first runnings," "seconds," either cane or beet, not exceeding No. 13, Dutch color-standard, raw sugar upwards of No. 13 being unavailable for his use on account of its relatively high taxation.

If you wish us to exhibit the two latter cases, we are quite ready to do so; we here abstain from it, afraid of getting long-winded.

Although the reduced rate of your drawback has, to the benefit of American taxpayers, materially reduced the exportation of American refines, nevertheless it continues remunerative to your refiners, and, to put the drawback on a level with the Dutch one, 2.50 cents would do. Enabled by a drawback of 2.82 cents, American refiners delivered at less than the price of production in 1886 to British consumers about 75,000 tons, representing a boon of more than $500,000 tendered by the American nation to the United Kingdom; the imports of Dutch refines into the latter country during 1886 amounted to 53,267 tons, which, chiefly owing to the American competition, could only find buyers at unremunerative rates, and, although in the latter part of 1886 American imports have considerably declined, this falling off has been largely counterbalanced by supplies from Russia, Germany, Austria, and France; these countries are now racing, by means of export premium and at the expense of their respective tax-payers, as to whom the greatest loss will impart in supplying the British consumer with his sweetening commodity at less than cost-price. Of course, this race keeps prices down, and although raw frequently assumed an upward tendency, the improvement soon came at a stand-still, owing to the refined market continuing not paying to the refiners. On this account the margin between raws and refines on an average was insufficient to the Dutch refiners all the year round. The distance between the London prices of 88 cents raw beet sugar free on board, Hamburg and Dutch crushed (superior brands) in bags of 100 kilograms has been, on an average, as follows:

Years.	Difference per cwt.	Imports of American refines (about).
	s. d.	*Tons*
1883	5 6	6,000
1884	5 4⅛	62,000
1885	3 10⅛	115,000
1886	4 4⅛	75,000

In the last times rumors have circulated as to the probability of the American sugar duties being repealed; if so, it would prove of immense importance to the sugar-trade of the world.

Sugar freed of duty, the 60,000,000 inhabitants of the United States would in a very few years consume 2,000,000 tons a year, and largely in this way contribute to cure the "mal-aise," caused by the gigantic production of raw, far beyond the actual requirements.

Artificial support of the European Governments has led to this over-production; it is killing the industry which it was supposed to benefit, as the decrease of sugar-value cannot be counterbalanced by the most liberally-granted subsidy supportable for any budget. A great number of Russian and Austrian factories are ruined; German ones are unprosperous, Dutch and Belgian growers severely complain.

For the time it is the French sugar-makers only which are flourishing, an enormous bounty being granted them, their fisc leaving duty free, four out of the 10 kilos extractable from 100 kilos of roots. How long is this gleam of prosperity to last? The first step, although not the right one, has been made already to put a stop to it. In order to cure the sufferings of her treasury (chiefly owing to the sugar-subsidizing), France intends raising sugar duty with 10 francs per 100 kilograms (60 instead of 50) and the due sugar-yield with 1 per cent. (7 per cent. instead of 6 per cent.), but, on doing so, apparently drawback should be proportionately raised. Exports of refines must increase, and the amount of drawback get again larger, to this effect, that a considerable part of the higher duty and yield-proceeds be absorbed, that for the home consumers the price of sugar (which in France is already twice as dear as in England) must still farther enhance and for the consumers abroad, to the contrary, still farther cheapen.*

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*The amount of sugar duty collected by the French treasury was, during 1885, 169,290,182 francs; 1886, 123,052,000 francs; decrease in 1886, 46,238,182 francs. The exports of refined by France amounted in 1885 to 69,805 tons; 1886, to 97,100 tons; increase in 1886, 27,295 tons. These figures need not be commented upon!

The actual situation cannot be of long duration, we suppose, viewing at the distressed state of the European budgets.

The sugar question could be radically solved by universal abolishment of the sugar duty, but this revenue being indispensable to most states, the solution simply is impossible on this account.

We are perhaps slowly reaching the point, when the various countries interested can form a new drawback convention on the basis of a duty on the raw beet roots, with a drawback based on an assumed yield of, say, 10 per cent., this yield to be raised or lowered at stated intervals by mutual consent.

The above-mentioned "mal-aise" has also severely afflicted our sugar-growing colony, Java.

In order to assist the Java sugar industry (not the industrials) a bill has been voted by our Chambers, in December last year, purporting: Suspension during five years of the export duty of, say, 30 Dutch cents per 100 kilograms of sugar; suspension during five years of the land-tax, viz, to the amount of 50 per cent. in behalf of the growers on grounds belonging to the Government, and 100 per cent. on behalf of the growers on private grounds. These allowances are requiring an expenditure of 1,960,000 Dutch florins a year, or rather decreasing the colonial revenue with said sum or thereabout.

Estimating a Java crop at 375,000 tons, the relief amounts to 0.53 Dutch florins per 100 kilograms, equal to about 10 cents per 100 American pounds. The character of this assistance is by no means a protectional one.

Imposing export duties is an anachronism; they ought to have been repealed in our colonies long since, but under the prevailing circumstances a repeal has become most urgent, not only because export duty was a wrong and an injury to our Java sugar-growers, but also because it now is an impediment to holding their ground against the bounty-fed European sugars; its appeal of course is an act of justice and of wise economy.

For the Dutch Indian Government, being owner of the greater part of the areal under cultivation for sugar-growing, the continuance of the sugar factories is of immense importance; decay would disable tenants to pay their land-rent; its temporary sublation or reduction, to the contrary, may perhaps enable them to overtide the hard times now prevailing and to settle later on the due lease, including the one for which payment has now been deferred for five years, and, last not least, sugar-makers continuing at work, pauperism, discontent, and rebellion amongst the numerous Javanese population employed by the factories are being prevented to the very benefit of the Government and of the welfare of our colony.

We trust the above particulars will have some interest to you; if so, we shall be pleased at their getting mention in your consular report, especially the comparative results of the American and Dutch drawback systems.

If you wish us to give any further elucidations we are always quite ready to do so.

We are, sir, yours truly,

DE HOLLANDSCHE SUIKER RAFFINADERY.
J. PEELEN.
J. H. G. FERMAN.

D. ECKSTEIN,
Consul of the United States of America, Amsterdam.

THE DIAMOND INDUSTRY AND TRADE AT AMSTERDAM IN 1886.

Whilst diamonds have, and always retain, a certain intrinsic value, whilst their quality is not impaired by age, climate, or from other causes, and though they are a species of property which can, to almost any amount, be put away for safe-keeping so conveniently, yet it is claimed that the diamond industry and the trade in the article do not escape the mutations to which other industries and general commerce are always subject.

Whatever at any time has a widespread effect, favorable or otherwise, upon industrial and commercial enterprises, operates upon and affects to about an equal degree the industry and trade in question.

This, it is said, has been clearly demonstrated during the past five years (1882–'86), as the prevailing general condition of the several countries wherein markets are usually and principally sought and found determined every rise and fall in the demand for the article, and brought

Cash buyers are said to enjoy an advantage of at least from 4 to 6 per cent. on purchases made here.

The aggregate amount earned or paid in wages to the workmen in the different branches of the diamond industry at Amsterdam is represented to me to amount to about 7,500,000 florins, or $3,000,000 per annum, reckoned on the scale of last year's operations.

From this sum must, however, be deducted the rather considerable amount of expenses which are incurred by polishers for use of moving-power, and for the privilege of plying their trade in the diamond factories, or which they incur, in many cases, at their homes on the same account.

To obtain the true figures of the number of persons engaged in producing the finished brilliant out of the rough diamond is extremely difficult, as a great many cleavers and cutters as well as polishers work at their homes.

The only estimate I could procure states that it may safely be assumed that from 7,000 to 8,000 individuals are at the present time interested here, in one way or another, in the industry under consideration, and in the business of purchase and sale of rough and finished goods.

The wages paid to or earned by the various classes of workmen, or for cleaving, cutting, and polishing, have been on a downward scale for the last five years or so, and this is chiefly attributable to the constant increase in the number of workmen, which would show that the inexorable law of demand and supply exerts itself in this case as well as in others.

As it is not very hard to learn one or the other of the processes of the trade, and as under anyways favorable circumstances the diamond workers, generally and comparatively, find themselves somewhat better situated than workmen in other trades, there appears to be a never-ceasing accession to the number of apprentices. If this continues to be the case much longer there would seem to be but poor prospects for them in the near future; and this the more so as there exists amongst the diamond workmen here no recognized organization, and as they are, up to the present, nearly defenseless against the manufacturers.

The above remark, based upon the written statement of one of the principal manufacturers here, seems noteworthy on that account, and, further, because it is so entirely contrary to the at present almost everywhere prevailing order of things.

The exports of diamonds from Amsterdam to the United States, in so far as their value is known to me through the certification of invoices at this consulate, amounted to $1,378,542.78 in 1886; to $347,527.33 in 1885; to $262,402.39 in 1884; to $227,763.86 in 1883; and to $397,865.11 in 1882.

The above figures are, however, far from representing the actual value of all the diamonds which have been in either one of those years purchased by Americans or for their account, and which have been shipped to New York and to other places in the United States.

For many purchases, aggregating a large sum annually, invoices are never presented for certification at this consulate, but the goods are either forwarded to Paris or London or taken upon the person of the buyers or owners, and invoices for them are presumably brought to our consulates-general in those cities and there certified.

It is needless to say that this practice is irregular, if not unlawful, and that in any event it involves a violation of the Treasury regulations.

The deliveries for conversion took place so quickly that at the end of November only a very small proportion of the old 4 per cent. issue remained outstanding for exchange.

The new rate of interest, 3½ per cent., went into force on the 1st of July, 1886.

The Government issued paid-up scrips, which are soon to be exchanged for the new obligations.

The denominations of the new bonds are 12,000, 6,000, 1,200, 1,000, 500, and 100 florins, with interest coupons attached, payable half-yearly, 1st of April and 1st of October. The interest is payable not only in Holland, but provision is made for its payment at Paris, London, Berlin, and Frankfort-on-the-Main.

The Government has assumed the obligation not to convert the new 3½ per cent. debt during the next ten years.

It is generally considered here that the conversion of the Dutch 4 per cent. national debt is one of the most successful and promptly perfected financial operations which have taken place in Europe latterly.

THE NATIONAL DEBT.

The national debt of the Netherlands consists of:

	Florins.
(1) Inscriptions in the Public Ledger (*Grootboek*) of the 2½ per cent. national debt to a nominal capital of	630,593,300
(2) Inscriptions in the Public Ledger of the 3 per cent. national debt to a nominal capital of	94,642,850
(3) Inscriptions in the Public Ledger of the 3½ per cent. national debt and 3½ per cent. obligations, issued in accordance with the law of May 9, 1886, Staatsblad No. 102, together representing a nominal capital of	348,085,000
(4) Three and one-half per cent. obligations of the late Amortization Syndicate, to a nominal capital of	9,243,000
Total	1,082,564,150

On the entire national debt the annual interest amounts at present to 31,104,723 florins.

REVENUE AND EXPENDITURES.

The estimated national revenue amounted for 1885 to 115,764,176 florins, and for 1886, to 120,149,065 florins; and the estimated amount of national expenditures was 135,614,355.875 florins in 1885, and 132,543,648.935 florins in 1886. This shows that in both years the expenditures exceeded the revenues; the deficit amounting to 19,850,179.875 florins in 1885, and to 12,394,583.935 florins in 1886.

According to a statement before me, and which I suppose to be correct, the appropriations for the national service of the current year (1887) are as follows:

	Florins.
Royal household	660,000.00
State establishments and royal cabinet	616,007.00
Department of foreign affairs	681,151.00
Department of justice	5,059,759.00
Department of interior	10,183,018.00
Department of navy	6,454,182.60
National debt	33,871,314.28
Department of the treasury	23,323,244.83½
Department of war	20,354,016.00
Department of water-works, trade, and industry	23,666,896.21
Department of colonies	1,310,508.43
Unforeseen expenditures	50,000.00
Total	126,220,097.35½

There was, for instance, the mania of conversions: Government converted, every town and townlet thought necessary to follow its example, and many a capitalist was compelled, not to have his income diminished more than he could afford, to take to securities of inferior quality but bearing a higher interest. Besides, the uncertain political situation in Europe induced many to invest their capital in America, which has nothing to fear from European difficulties and in the long run can only profit by them.

Consequently, upon the low price of money both in America and here, the prices of first-class railway bonds had risen considerably, so that these for some time already did not yield as much interest as before, and were not in request any more for investment. Under these circumstances it is easily to be accounted for that bonds of a slightly speculative character, but yielding a satisfactory interest, found a ready reception here; thanks, however, to the enormous progress and development everywhere in America such investments have proved very profitable.

In the mean time the construction of so many new lines of road, especially west and south of Chicago, is viewed here with some distrust, as it is feared that the competition which these constructions are sure to create must finally lead to renewed tariff-wars, the fatal consequences of which have been so deeply felt here.

But on the other hand it is considered that these constructions are not undertaken, as formerly, by feeble companies, but by very powerful ones, who are able in case of need to maintain the new lines for a considerable time out of their own purse; so that at the worst a reduction of dividends is to be expected, and that in a country which, like the United States, has such enormous resources to fall back upon, and is not overweighted by surplus population and military charges, in many respects some greater risk may be taken than in our overburdened and politically much and constantly menaced Europe.

PETROLEUM IN HOLLAND IN 1886.

From a printed statement before me, which I believe to be entirely correct, though it is not official, but published by the prominent firm of M. & R. De Mouchy, of Rotterdam, I observe that the consumption of petroleum in Holland has further increased by about 36,000 barrels in 1886 as against 1885, and that its increase has been steadily in progress for a number of years last past, the same having amounted to but 315,000 barrels in 1878, whilst about 542,000 barrels have been consumed in this country in 1886.

But it is not owing so much to the increase in the consumption of the article as to that in the re-exportation of the same, that the trade therein has been so progressive during the past year. This refers more particularly to the port of Rotterdam, where formerly existing great obstacles to the convenient and cheap approach to the city are said to have been entirely obliterated, and where the new water-way now affords ample facility for vessels of almost any draught to come with full cargoes up to the wharves of the port without difficulty.

As a part of the result of the improvement in this respect it is claimed that the petroleum trade increased as it did last year, so that the imports amounted to nearly 600,000 barrels, of which about 55 per cent., or nearly 300,000 barrels, were re-exported.

It is even stated that the setting in of so considerable and sharp a competition against Bremen, Hamburg, and Antwerp in handling the article in question, or so much of it as is calculated to reach German markets, is now attracting general attention at those ports and has induced the German Government to reduce the freight rates for the transportation of petroleum 30 per cent. on certain Government railways. This, as I understand, is more especially done in order to favor and protect the port of Bremen in retaining, if possible, its petroleum trade.

The total imports at Rotterdam increased in 1886 by about 65 per cent. as against 1885, and about 155 per cent. as against 1884.

The deliveries show a very much similar result. In 1886 they increased by about 40 per cent. as against 1885, and by about 140 per cent. as against 1884.

The matter shall continue to receive my attention, and anything interesting or noteworthy and relating thereto will be reported.

Consumption of petroleum in Holland.

Year.	Barrels.	Year.	Barrels.
1886	542,000	1881	385,000
1885	500,000	1880	360,000
1884	505,000	1879	325,000
1883	470,000	1878	315,000
1882	425,000		

Import and deliveries of petroleum at Rotterdam and Amsterdam, each year, from 1878 *to* 1886, *inclusive.*

Years.	Rotterdam.		Amsterdam.		Years.	Rotterdam.		Amsterdam.	
	Imports.	Deliveries.	Imports.	Deliveries.		Imports.	Deliveries.	Imports.	Deliveries.
	Barrels.	*Barrels.*	*Barrels.*	*Barrels.*		*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*
1886	*594,610	*557,068	317,952	310,202	1881	193,235	204,000	196,329	205,924
1885	357,102	305,345	208,000	237,000	1880	215,071	206,466	217,031	194,414
1884	234,515	233,413	265,000	252,000	1879	189,850	199,880	150,209	156,379
1883	194,736	221,011	211,300	235,353	1878	219,298	215,872	133,633	110,326
1882	292,690	232,000	189,573	180,877					

*These imports include about 27,000 barrels landed at Vlissingen, and about 29,000 barrels delivered at that port.

OLEOMARGARINE IN HOLLAND IN 1886.

The American share in the trade and consumption or use of "margarine" in artificial butter-making in Holland continues to be an important interest, which it would seem to behoove our manufacturers of the article to guard and foster most carefully if they desire to retain or enlarge it, as the oil is now produced in ever-improving qualities in Austria, Hungary, France, and Russia, from all of which countries it is said to be imported into Holland in apparently increasing quantities.

As to the quantity imported from the United States in 1886, I have consulted a number of printed and written statements emanating and received from parties prominently identified with transactions in margarine, but hardly any two of them agree thereon. The lowest estimate I have seen puts the imports of last year at 114,000 tierces, and the highest at 121,480 tierces, or about 18,300,000 kilograms.

In the absence of any official records being kept or statistics on the subject published, I am unable to determine what really are the true and correct figures representing the imports during the past or any one previous year, or whether they increased or decreased in 1886 as against the preceding year or years.

Regarding the quantities of European margarine which found their way into Holland last year or during any given previous period, it can only be stated that in the aggregate they are very large, but that it is impossible to obtain and furnish even an approximately correct estimate of them. At any rate those most intimately conversant with the matter claim it would be impossible to do so.

From a statement on the subject, published at Vienna, I quote as follows:

> The transactions (*Umsatze*) of European margarine in Holland, in 1886, amounted to 46,500 tierces. This, however, refers only to such transactions as are actually known,

NORWAY.

Report of Consul Gade.

From the tables on the foreign trade of Norway for the year 1885 published a few months since by the central statistical bureau at Christiania, it appears that the total value of the commerce between the United States and the Kingdom of Norway during the said year amounted to 7,770,700 kroner, equal to $2,082,548, of which 7,363,300 kroner, or $1,973,364, represented the imports from the United States and 407,400 kroner, or $109,183, the exports from Norway to the United States. Against these figures we find the following:

Years.	Imports.	Exports.	Total
	Kroner.	*Kroner.*	*Kroner.*
1884	6, 432, 700	304, 100	6, [illegible]
1883	6, 185, 700	306, 900	6, [illegible]
1882	2, 569, 900	166, 500	2, [illegible]
1881	2, 980, 900	46, 800	2, [illegible]
1880	1, 900, 500	164, 600	2, [illegible]

We see a rapid and considerable development of the commercial transactions between the United States and Norway, due principally to the direct line of steamers established in 1882 between this country and the port of New York. All the foregoing figures, taken from the official Norwegian returns, give, however, an incorrect estimate of the commerce which has gone on between the two countries. The customs returns in Norway give only the direct shipments from the United States as imports from America, and consequently no inconsiderable part of the imports put down in the tables under the heads of Great Britain and other countries actually belong to the imports from the United States. On the other hand several important Norwegian export articles, particularly fishery products and wood pulp, have often been shipped *via* English ports, and are accordingly set down as exports to Great Britain.

In examining the invoice book of the consulate I find that the value of the declared exports to the United States from this consular district alone amounted in 1885 to 341,350 kroner, or $91,481, a sum almost equal to the total value of the exports from the whole of Norway according to the official returns. As the exportation of all kinds of fishery products to the United States was considerable from the consular district of Bergen in 1885, I would estimate the aggregate exports from Norway to America at about 800,000 kroner, or $214,400. Considering the large importations of American goods *via* England and Germany, I think that the imports from the United States to Norway in 1885 may be estimated at about 9,000,000 kroner, or $2,412,000. The commerce between America and Norway during the past year would then represent an amount of near 10,000,000 kroner, or over $2,500,000.

The following is an enumeration of the principal articles imported from and exported to the United States from Norway in 1885, with addiion of quantities (weights) and values, as given by the Norwegian statistical returns:

Imports from and exports to the United States in 1885.

IMPORTS.

Articles.	Quantity.	Value.
		Kroner.
Salted beef and pork........kilograms..	3,810,804	2,247,500
Butter........do....	228,810	297,500
Wheat........100 kilograms..	7,216	102,500
Wheat flour........do....	6,670	126,700
Other grains—maize........do....	16,814	176,900
Sugar........kilograms..	227,240	71,400
Sirup........do....	2,237,490	380,400
Tobacco........do....	129,457	162,100
Fruits, vegetables........do....	60,358	26,700
Cotton........do....	438,760	421,200
Manufactures of metal........do....	11,200	19,500
Leather........do....	1,039,420	1,975,300
Petroleum........do....	7,087,720	1,013,500
Manufactures of wood........	100,000	106,400
Sailing vessels........register tons..	1,266	63,300
Locomotives and machinery........	....	106,900
Carriages, instruments, and watches........	....	24,800
Sundries........	....	40,700
Total........	....	7,363,300

EXPORTS.

Horses........	5	300
Dried fish (stockfish)........kilograms..	138,770	53,700
Herrings........hectoliters..	5,933	63,600
Other fish (anchovies)........do....	633	15,300
Other animal food (cheese)........	....	11,700
Cod liver oil........hectoliters..	572	31,200
Wood pulp:		
Dry........kilograms..	7,000	207,600
Moist, 50 per cent. water........do....	3,759,900	18,300
Books........	2,819	5,700
Sundries........	....	....
Total........	....	407,400

The director of the statistical bureau gives in his introduction to the tables on the trade of Norway in 1885 an interesting general review of the condition of trade in that year. I beg to submit an extract of this review:

The aggregate weight of the merchandise sold between Norway and foreign countries in 1885 was reported to be 3,071,000,000 kilograms, of which 1,422,600,000 kilograms were imports, and 1,648,400,000 kilograms exports.

The total value of the foreign commerce was estimated at 247,500,000 kroner, of which the imports represented a value of 145,600,000 kroner, and the exports 101,900,000 kroner. Of the latter 4,200,000 kroner were re-exported foreign products.

The following comparative statement shows the weight and value of the Norwegian foreign trade for the last ten years:

Year.	Weight.			Value.		
	Imports.	Exports.	Total.	Imports.	Exports.	Total.
	Kilograms.	*Kilograms.*	*Kilograms.*	*Kroner.*	*Kroner.*	*Kroner.*
1876	915,700,000	1,426,500,000	2,342,200,000	167,400,000	118,100,000	285,500,000
1877	1,182,500,000	1,367,700,000	2,550,200,000	189,800,000	109,100,000	298,900,000
1878	963,200,000	1,262,400,000	2,225,600,000	140,400,000	91,600,000	232,000,000
1879	951,200,000	1,182,100,000	2,133,300,000	132,200,000	89,200,000	221,400,000
1880	1,069,100,000	1,454,100,000	2,523,200,000	150,900,000	108,700,000	259,600,000
1881	1,167,600,000	1,583,200,000	2,750,800,000	165,000,000	120,900,000	285,900,000
1882	1,224,400,000	1,678,000,000	2,902,400,000	160,500,000	122,900,000	283,400,000
1883	1,303,300,000	1,695,900,000	2,999,200,000	161,300,000	116,100,000	277,400,000
1884	1,327,100,000	2,102,900,000	3,430,000,000	158,800,000	112,200,000	271,000,000
1885	1,422,600,000	1,648,400,000	3,071,000,000	145,600,000	101,900,000	247,500,000

The foregoing figures show that the quantity, or weight, of the merchandise sold between Norway and foreign countries, which had rapidly and continually increased during the year 1879–'84, did fall off a little in 1885 from the preceding year, though equal to any of the previous years. Relating to the imports the increase went on also in 1885, chiefly owing to the increasing consumption of coal. The quantity of exports appears on the other hand with much smaller figures than in 1884, which is principally owing to the circumstance that the exportation of ice, which, in 1884, had increased exceptionally, did, in 1885, shrink to the usual quantity. The exportation of lumber in 1885 was also somewhat smaller than usual. Of ice a decline of 393,000 tons (1 ton=1,000 kilograms), and of lumber of 78,000 tons is noticeable, while an increase of 17,000 tons appears in the other export articles.

The value of the foreign commerce in 1885 shows the considerable decrease of 32,000,000 kroner, or nearly 11½ per cent. in the average value of the commerce for the past four years. As compared with 1884 the decrease of the imports was 13,200,000 kroner, and of the exports 10,300,000 kroner. This falling off is chiefly due to the decline of the prices of many articles.

The balance of trade in 1885 was not favorable to Norway. The value of the imports exceeded by 43,700,000 kroner the value of the exports, a deficit hardly covered by the revenue of the shipping. The gross income of this industry was, in 1882 and 1883, estimated at over 100,000,000 kroner, but fell off in 1882 and 1884 to 80,000,000 and 93,000,000, and in 1885 to 85,000,000. About the half of the latter sum was probably the net profit of the shipping of the year. In addition to this it must be borne in mind that Norway pays annually large sums to foreign countries as interest of public loans contracted by the Government, the Landed Bank, and her communities. The two former alone have to pay about 6,500,000 kroner annually as interest of loans. Some few items may, perhaps, reduce the unfavorable balance of trade, and the amount spent here by foreign tourists, and estimated at nearly 5,000,000 kroner, may be mentioned.

IMPORTS OF CEREALS.

Amongst the principal imports the cereals come first in importance. The importation of these articles was as follows:

Years.	Quantity.	Value.	Years.	Quantity.	Value.
	Hectoliters.	*Kroner.*		*Hectoliters.*	*Kroner.*
1880	3, 102, 000	37, 410, 500	1883	3, 439, 000	34, 678, 500
1881	3, 409, 000	41, 840, 700	1884	3, 870, 000	31, 669, 100
1882	3, 199, 000	33, 138, 300	1885	3, 778, 000	31, 396, 000

The period of 1876–'80 showed an annual average importation of grains of 3,433,000 hectoliters, of value 36,900,000 kroner, and the period of 1881–'85, 3,439,000, of value 34,550,000 kroner. The quantity imported in 1885 exceeds thus considerably the consumption of an average year, but the value of the imported grain was much less than usual owing to the very low prices. The average price of rye, the principal kind of grain, was, during the years 1876–'80, estimated at 16 kroner per 100 kilograms (the grain delivered in Norwegian ports), but in 1885 the price was quoted as 10.80 kroner, or about 32 per cent. lower. As the country in 1885 imported about 174,000,000 kilograms of this kind of grain it appears that they saved about 9,000,000 kroner by the decline in the price of this sole article.

IMPORTS OF MANUFACTURED ARTICLES.

Next in importance to cereals comes the large class of goods which is styled manufactured or dry goods. We find that the imports of this class were as follows:

Years.	Quantity.	Value.	Years.	Quantity.	Value.
	Kilograms.	*Kroner.*		*Kilograms.*	*Kroner.*
1880	4, 800, 800	23, 707, 500	1883	5, 840, 200	24, 339, 100
1881	5, 504, 400	25, 997, 100	1884	6, 501, 500	26, 265, 900
1882	5, 759, 700	26, 925, 400	1885	6, 039, 000	22, 496, 900

The quantity of these goods steadily increased during the years 1880 to 1884, while 1885 shows a slight decline as compared with the previous year. The value, which in 1874 had reached 33,400,000 kroner, the importation being 6,000,000 kilograms, has on the other hand since then fallen off considerably. This can be accounted for not only by the far higher prices of these articles during that period but also by the fact that the consumption of more expensive goods was then much larger. The average value of 1 kilogram of dry goods has fallen off from 5.50 kroner in 1874 to 4.94 kroner in 1880; from 4.04 kroner in 1884 it went down to 3.73 kroner in 1885.

The importation of groceries or colonial products, which are next in rank among the imports, was as follows:

Year.	Quantity.	Value.	Years.	Quantity.	Value.
	Kilograms.	*Kroner.*		*Kilograms.*	*Kroner.*
1881	26, 930, 000	18, 375, 000	1884	30, 998, 000	16, 718, 000
1882	26, 929, 000	16, 109, 000	1885	27, 116, 000	14, 622, 000
1883	29, 210, 000	17, 241, 000			

Relating to the quantities of the imports, we see that they were o general increase until 1885. The prices had, on the other hand, go down so much that the value of the groceries imported had not f many years been so low as in 1885, when it only amounted to 14,600,0 kroner against 20,200,000 in 1871–'75,26,000,000 in 1878, and 18,500,0 in 1878–'81.

The importation of some important articles of this class during th last five years was as follows:

Articles.	1881.	1882.	1883.	1884.	18
	Kilograms.	*Kilograms.*	*Kilograms*	*Kilograms.*	*Kilogra*
Coffee	7,603,000	6,993,000	7,994,000	7,372,000	[illegible]
Sugar	9,393,000	10,223,000	10,981,000	12,896,000	[illegible]
Sirup	4,957,000	4,972,000	5,458,000	5,663,000	[illegible]
Tobacco leaves	1,928,000	1,714,000	1,761,000	1,918,000	[illegible]

The importation of coffee was in proportion the largest in 1885, bu sugar and sirup show a great falling off.

Next to the foregoing classes of imports come two other classes o articles, viz, provisions and hardware, each class representing a sum o from 10,000,000 to 12,000,000 kroner. Among the former, beef, pork and butter are the chief articles.

Norway produced once herself more than sufficient beef and pork and about the year 1850 she only needed annually to import 500,0 kilograms of these articles from foreign countries, but lately the importation has been as follows:

Years.	Quantity.	Value.	Years.	Quantity.	Val
	Kilograms.	*Kroner.*		*Kilograms.*	*Kron*
1881	6,935,400	4,883,600	1884	5,744,000	[illegible]
1882	4,797,500	3,648,400	1885	7,466,000	[illegible]
1883	6,996,700	5,105,200			

The country needs, accordingly, under ordinary circumstances, a supply from abroad of 6,000,000 or 7,000,000 kilograms of meats. Th imports were larger during the years 1877 to 1879, viz, 8,000,000 o 8,500,000 kroner, which can be accounted for by the extensive railro building then going on.

The imports of butter have during the last years increased a little in quantity but decreased in value. The importation was:

Years.	Quantity.	Value.	Years.	Quantity.	Val
	Kilograms.	*Kroner.*		*Kilograms.*	*Kron*
1881	3,511,200	5,969,000	1884	3,467,000	[illegible]
1882	3,319,500	5,590,400	1885	3,789,000	[illegible]
1883	3,188,500	5,101,500			

In this connection it may be noted that quite large lots of Norwegia butter, chiefly margarine butter, have been exported since 1878. The exportation of this article had declined from 1,667,800 kilograms (2,501,70 kroner) in 1880 to 1,051,080 (1,524,100 kroner) in 1882, but has sinc been on the increase, and rose in 1884 to 1,990,000 kilograms (2,586,4 kroner), and to 1,627,400 kilograms (1,952,800 kroner) in 1885.

The value of iron and hardware imports in 1885 amounted to 10,593,000 kroner, of which 5,364,000 kroner represent raw and half manufactured metals, and 5,229,000 kroner manufactured metals. In the former class pig-iron, steel, bar-iron, and sheet-iron come in for 3,651,000 kroner, and a weight of 33,077 tons, against 29,368 tons in 1882, and 18,578 tons in 880. Pig-iron had fallen off from 19,000 tons in 1877 to 10,395 tons in 885, but the imports of bar-iron and sheet-iron, respectively 16,217 and ,606 tons, were quite as large as in any previous year, 1883 excepted.

The imports of brandy and spirits have fallen off considerably during he last years, and the exports have at the same time increased so much that they even exceeded the imports during the years 1879–'83. The following table will show the proportion between the imports and the exports of these articles:

Years.	Imports.		Exports.		Increase + or decrease — of imports of 50 per cent. strength.
	Brandy and spirits.	Brandy and spirits calculated f 50 per cent. strength.	Brandy and spirits.	Brandy and spirits calculated of 50 per cent. strength.	
	Liters.	*Liters.*	*Liters.*	*Liters.*	*Liters.*
876	4,195,000	6,460,000	34,000	34,000	+6,426,000
877	3,291,000	5,052,000	16,000	16,000	+5,036,000
878	2,226,000	3,392,000	577,000	894,000	+2,498,000
879	922,000	1,213,000	1,870,000	2,783,000	−1,570,000
880	848,000	1,085,000	782,000	1,163,000	−78,000
881	875,000	1,109,000	1 655,000	2,496,000	−1,387,000
882	823.000	1,000,000	774,000	1,102,000	−102,000
883	880,000	1,102,000	856,000	1,247,000	−145,000
884	913,000	1,154,000	549,000	813,000	+341,000
885	854,000	1,039,000	492,000	768,000	+271,000

The home production was, in 1875, 5,244,000 liters, and rose gradually until 1879, when it reached 7,762,000 liters. Since then it has again fallen off, and was, in 1885, 6,569,000 liters. The domestic consumption of brandy during the last year was estimated at about 6,340,000 liters, or 3.3 liters per each individual, which is a trifle less than the average figure for the previous four years.

The importation of illuminating oils (petroleum and paraffine oil) was very large in 1885, viz, 10,417,000 kilograms, though it did not reach the figure for 1884, which was the largest year in this trade.

The domestic consumption of this article was as follows:

Years.	Quantity.	Years.	Quantity.
	Kilograms.		*Kilograms.*
1878	5,853,000	1883	8,831,000
1881	8,027,000	1884	9,783,000
1882	8,700,000	1885	10,693,000

The consumption has continually increased, but the prices have steadily declined. The 10,700,000 kilograms consumed in 1885 have, therefore, probably not cost the country more than the 5,900,000 kilograms imported in 1878.

The importation of coal in 1885 amounted to 8,261,000 hectoliters, estimated at 7,766,000 kroner. The quantity exceeded that imported in 1884, which had shown the highest figure up to that time.

The purchase of foreign steamers, which in 1882 had been much larger than in any previous year, has fallen off much; which appears from the following comparative table:

Years.	Number.	Register tons.	Value.
			Kroner.
1881	19	6,643	2,452,000
1882	33	14,963	6,278,000
1883	23	8,701	3,344,000
1884	19	5,592	2,678,000
1885	7	2,834	853,000

If all import articles are divided into two large classes, imports intended for consumption and imports intended for industrial purposes, the results of the importation during the past ten years will be the following:

Years.	Imports intended for domestic consumption.	Imports intended for industrial purposes.	Total.	Imports intended for domestic consumption.	Imports intended for industrial purposes.
	Kroner.	*Kroner.*	*Kroner.*	*Per cent.*	*Per cent.*
1876	122,900,000	44,500,000	167,400,000	73.4	26.6
1877	139,000,000	50,800,000	189,800,000	73.2	26.8
1878	104,200,000	36,100,000	140,300,000	74.2	25.8
1879	98,800,000	33,400,000	132,200,000	74.7	25.3
1880	113,600,000	37,300,000	150,900,000	75.3	24.7
1881	122,500,000	42,500,000	165,000,000	74.2	25.8
1882	110,900,000	49,600,000	160,500,000	69.1	30.9
1883	114,200,000	47,100,000	161,300,000	70.8	29.2
1884	110,400,000	48,400,000	158,800,000	69.6	30.4
1885	101,800,000	43,800,000	145,600,000	69.9	30.1

The exports of Norway for the years 1866 to 1885 may in regard to their values be classified thus:

Years.	Products of forestry and wood industry.	Fishery products.	Other Norway articles.	Re-exported foreign goods.	Total.
	Kroner.	*Kroner.*	*Kroner.*	*Kroner.*	*Kroner.*
1866-'70*	31,040,000	33,330,000	8,070,000	840,000	73,280,000
1871-'75*	44,950,000	41,790,000	16,920,000	2,560,000	106,220,000
1876-'80*	38,800,000	43,140,000	19,120,000	2,310,000	103,370,000
1881-'85*	42,860,000	42,920,000	26,080,000	2,970,000	114,830,000
1881	44,910,000	50,160,000	24,030,000	1,830,000	120,930,000
1882	45,890,000	47,070,000	26,900,000	3,100,000	122,960,000
1883	43,800,000	42,730,000	26,480,000	3,130,000	116,140,000
1884	40,520,000	39,720,000	29,340,000	2,620,000	112,200,000
1885	39,160,000	34,920,000	23,680,000	4,180,000	101,940,000

* On an average.

The two principal export articles, timber and fish, which about the year 1865 amounted to about nine-tenths of the aggregate exports, have during the last years amounted to a little above seven-tenths. As compared with the former years, their value has certainly risen; but it has been stationary since 1870, while the value of the other exports has increased considerably. At percentage rate the distribution of the different classes of exports was as follows:

Years.	Timber and fishery products.	Other products.	Reshipped goods.	Total.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*
1866–'70*	87.9	11.0	1.1	100
1871–'75*	81.7	15.9	2.4	100
1876–'80*	79.2	18.6	2.2	100
1881–'85	74.5	22.9	2.6	100
1881	78.6	19.9	1.5	100
1882	75.6	21.9	2.5	100
1883	74.5	22.8	2.7	100
1884	71.5	26.2	2.3	100
1885	72.6	23.3	4.1	100

*On an average.

It is chiefly due to the single article, ice, that some decline in the percentage of other exports besides timber and fish appeared in 1885. Of this article an unusually large quantity was exported in 1884, and sold at very profitable prices. In 1885 the exportation fell off again to its normal point.

Of the value above given of the Norwegian forestry products exported in 1885, namely, 39,160,000 kroner, 31,236,000 kroner belong to timber, properly speaking, 5,664,000 kroner to wood pulp, and 1,802,000 kroner to matches.

Exports of timber during the ten years 1876 *to* 1885.

Years.	Planed timber.	Sawed timber.	Hewn timber.	Round timber.	Staves.	Firewood.	Total.
	Reg. tons.	*Reg. tons.*	*Reg. tons.*	*Reg. tons.*	*Reg. tons.*	*Reg. tons.*	*Reg. tons.*
1876	144,199	340,594	134,572	240,846	29,854	42,589	932,654
1877	158,279	314,186	101,479	197,292	28,151	31,121	830,508
1878	162,198	219,193	97,846	195,429	27,016	35,332	737,014
1879	164,770	176,893	102,134	207,417	26,148	29,496	706,858
1880	193,654	245,548	105,628	290,739	30,061	29,576	895,206
1881	227,088	228,951	80,016	280,429	34,405	31,102	881,991
1882	234,044	268,484	66,485	278,520	34,526	36,750	918,809
1883	247,667	244,150	66,165	303,007	43,977	40,190	945,156
1884	238,954	243,920	69,356	307,826	39,969	39,206	939,231
1885	245,936	236,011	59,441	242,666	34,928	42,405	860,387

The quantity of the exported timber was smaller in 1885 than in any of the previous five years, and was less by 49,000 register tons than the average imports for the years 1881–'85, but 40,000 register tons larger than the quantity for the years 1876–'80. The exports of sawed and planed timber have during the last years generally been somewhat over 480,000 register tons, after having reached 502,500 tons in 1882, the largest quantity exported since 1873 and 1874, when it rose to 570,000 and 550,000 register tons, respectively.

Of planed timber a somewhat larger average quantity was exported during the last years than of sawed timber, while in 1877 the proportion was one-third of planed to two-thirds of sawed timber. The exports of hewn timber, *i. e.*, beams, &c., have steadily declined, and amounted in 1885 to not much more than one-half of the average exports of the years 1876–'80, and to one-third of the average exports of 1871–'75. Also the shipping of mining timber and pit-props was smaller than in the years immediately preceding.

The prices which timber brought in 1885 were still lower than those of 1884, the difference being 1 or 2 kroner per register ton. The prices of 1885 were nearly equal to those of 1879, after having risen considerably in 1880–'82.

The exportation of wood pulp, which in 1875 still amounted to only 8,540 tons, valued at 683,000 kroner, has during the last six years amounted to the following:

Years.	Quantity.	Value.	Years.	Quantity.	Value.
	Tons.	*Kroner.*		*Tons.*	*Kroner.*
1880	26,055	2,345,000	1883	70,464	4,845,[illegible]
1881	42,800	4,280,000	1884	76,619	4,722,[illegible]
1882	58,884	4,009,000	1885	90,781	5,[illegible]

This article has within some years acquired considerable importance, and notwithstanding the declining prices the quantities of export have increased steadily and considerably. In the years 1884 and 1885 alone the exports rose from 76,000 to 90,800 tons.

In regard to the other large class of Norwegian export articles, the fishery products, it has already been shown in former statistical publications that the years 1882 and 1883 were remarkable for a quite unusual decline in the exports of all the more important fishery products, and that an exceptional rise in the prices brought at the same time the value to the level of the most prosperous years. The next year gave a quite different result, showing an increase of the quantities and a falling off in the prices. About the same was observed also in 1885.

The exportation of klipfish, or cured fish, the principal product of the large fisheries, was as follows:

Years.	Quantity.	Value.	Years.	Quantity.	Value.
	Kilograms.	*Kroner.*		*Kilograms.*	*Kroner*
1881	41,919,000	16,012,000	1884	37,666,000	13,162,[illegible]
1882	40,120,000	17,653,000	1885	37,372,000	11,847,[illegible]
1883	31,438,000	16,041,000			

In regard to the quantity, an increase of nearly 6,000,000 kilograms is noticeable from 1883 to 1885, but as the average prices have at the same time fallen off from 51 to 32 ore per kilogram, or about 38 per cent. the value of the exports shows much lower figures.

We observe the same proportion in the exportation of stockfish (dried fish). The exports amounted to the following:

Years.	Quantity.	Value.	Years.	Quantity.	Value.
	Kilograms.	*Kroner.*		*Kilograms.*	*Kroner.*
1881	18,876,000	6,135,000	1884	13,875,000	5,[illegible]
1882	14,907,000	6,727,000	1885	16,830,000	5,122,[illegible]
1883	10,907,000	5,488,000			

Of roe, 64,000 hectoliters, valued at 1,246,000 kroner, were shipped in 1885, against 40,000 hectoliters, of value 1,525,000 kroner, in 1884. The price had fallen off from 38 to 19.50 kroner per hectoliter, or nearly one-half.

The market also for cod-liver oil has been very dull during the last year, and especially for the finer qualities. While steam-refined medicinal cod-liver oil brought on an average 180 kroner per hectoliter in 1883, it was valued at 95 kroner in 1884, and at 62 kroner in 1885. Other medicinal cod-liver oils had fallen off from 115 kroner per hectoliter to 65 kroner in 1884, and 48 kroner in 1885. Clear fish oil declined from 60 to 48 kroner in 1884, and 40 kroner in 1885, &c.

The total shipments of the different kinds of fish oils were as follows:

Years.	Quantity.	Value.	Years.	Quantity.	Value.
	Hectoliters.	*Kroner.*		*Hectoliters.*	*Kroner.*
1880	169,000	5,295,000	1883	83,000	4,430,000
1881	125,000	5,438,000	1884	125,000	5,706,000
1882	101,000	5,883,000	1885	147,000	5,228,000

In the value given for 1885, whale oil amounting to 969,000 kroner (1884, 773,000 kroner) is also included.

The exports of herring, which had fallen off from 1,091,000 hectoliters, valued at 16,280,000 kroner, in 1881; and 664,000 hectoliters, valued at 11,567,000 kroner, in 1883, amounted to 741,000 hectoliters in 1884, of a value of 10,556,000 kroner, and to 698,000 hectoliters, of a value of 8,129,000 kroner, in 1885.

The 24,000,000 kroner, which according to the foregoing statements make the total value of the other Norwegian exports, besides fishery products and forestry products (wood pulp and matches included), embrace a large quantity of rather different articles, none of which bear any comparison in importance with the two said principal articles, but which, however, are every year increasing in number and importance. The subjoined list gives an enumeration of all the articles whose export value in 1885 exceeded 400,000 kroner:

Articles.	Value.	Articles.	Value.
	Kroner.		*Kroner.*
Nails	2,631,000	Condensed milk	695,000
Skins	2,461,000	Copper and old metal	670,000
Butter	1,953,000	Cotton goods	553,000
Woolen goods	1,629,000	Glassware	496,000
Ores	1,372,000	Nickel ore	485,000
Paper and pasteboard	1,005,000	Sole-leather	472,000
Oats	867,000	Hewn stone	468,000
Ice	797,000		

Besides the foregoing articles horses are also exported, probably to an amount of over 400,000 kroner. In 1884 apatite was exported for 710,000 kroner (1885, 168,500 kroner), beer for 637,000 kroner (1885, 381,000 kroner), and blubber for 636,000 kroner (1885, 71,000 kroner). The cause of the considerable falling off in the latter article is probably that the blubber was for a great part boiled to oil in 1886 and imported in that form.

Of smaller exports may be noted books, machines, linen goods, cotton yarn, yarn of linen and hemp, game, carraway-seed, bran, preserved food, rags, linseed and rape-seed oil, oxalic acid, iodine, bricks, and lamps.

In addition to the foregoing remarks on the commerce of Norway in 1885, I beg to subjoin a table showing the values of her trade with the different foreign nations for the years 1884 and 1885.

Countries.	Imports.		Exports.		Total commerce.	
	1884.	1885.	1884.	1885.	1884.	1885.
	Kroner.	*Kroner.*	*Kroner.*	*Kroner.*	*Kroner.*	*Kroner.*
Germany	45,781,000	41,666,400	15,272,000	12,136,300	61,053,800	[illegible]
Great Britain	42,101,500	37,852,900	37,274,100	34,182,100	79,375,600	[illegible]
Sweden	17,457,900	16,839,500	13,041,500	13,060,406	30,499,400	[illegible]
Russia and Finland	15,704,000	16,338,300	4,255,800	2,775,500	19,959,800	[illegible]
Denmark	13,046,300	11,069,800	6,091,000	4,872,000	19,137,300	[illegible]
Countries out of Europe	7,339,700	7,957,500	2,413,400	3,799,300	9,753,100	[illegible]
Holland	5,404,800	4,828,300	5,371,500	5,416,100	10,776,300	[illegible]
France	5,549,400	4,563,200	9,527,400	7,849,000	15,076,800	[illegible]
Spain	518,800	403,500	11,327,900	10,087,900	11,922,600	[illegible]
Belgium	2,670,600	2,377,000	3,769,000	4,005,400	6,451,400	[illegible]
Italy and Austria	423,100	395,900	3,084,000	2,924,200	3,619,400	[illegible]

Trade of the principal Norwegian cities in 1885.

Cities.	Imports.	Exports.	Total.	Percentage
	Kroner.	*Kroner.*	*Kroner.*	[illegible]
Christiania	70,564,700	25,051,900	95,616,600	[illegible]
Bergen	24,541,100	14,443,400	38,984,500	[illegible]
Trondhjem	10,875,100	5,218,000	16,093,100	[illegible]
The other cities	39,623,700	57,224,800	96,848,500	[illegible]
Total	145,604,600	101,938,100	247,542,200	[illegible]

GERH. GADE,
Consul.

UNITED STATES CONSULATE,
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